

US EPA RECORDS CENTER REGION 5



554248

SAMPLING DATA

MEMORANDUM

DATE: 2-19-88
TO: William Messenger, U.S. EPA
FROM: Cathy Schlesinger
SUBJECT: Drinking Water Sample Results

Sample RW2
Site Name Town & Country Auto Parts
PAN # FOH0523SA
TDD # F05-8703-347
EPA ID # OHD103536876

Please find attached the data summary sheets, a copy of the original data, and laboratory blank/quality control information for the drinking water sample collected from:

Name Richard Elsen / Town & Country Auto Parts
Address 6800 River Rd.
City New Baltimore (Harrison)
State OHIO
Zip Code 45030
Phone Number 513/385-4040

0099:3

No Contamination X
No hits above any health-related standards.

C
6-9-88

RESIDENTIAL

WELL WATER

SAMPLE DATA

Table 1
DATA OF RESIDENTIAL WELL SAMPLE ANALYSIS
AND APPLICABLE FEDERAL DRINKING WATER STANDARDS
AND HEALTH ADVISORIES

SAMPLE: <i>RW 2</i>	CONTAMINANT	LABORATORY QUALITY CONTROL DATA (ppb)							COMMENTS
		CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	
VOLATILE ORGANIC COMPOUNDS									
BENZENE		5	NR					1.5	
BROMODICHLOROMETHANE								1.5	
BROMOFORM								1.5	
BROMOMETHANE								10	
CARBON TETRACHLORIDE		5	NR					1.5	
CHLOROBENZENE			300					1.5	
CHLOROETHANE								1.5	
2-CHLOROETHYL VINYL ETHER								1.5	
CHLOROFORM								1.5	
CHLOROMETHANE								10	
DIBROMOCHLOROMETHANE								1.5	
1,1-DICHLOROETHANE								1.5	
1,2-DICHLOROETHANE		5	NR					1.5	
1,1-DICHLOROETHENE			7	7				1.5	
trans-1,2-DICHLOROETHENE				70				1.5	
1,2-DICHLOROPROPANE					NA			1.5	
cis-1,3-DICHLOROPROPENE								2	
trans-1,3-DICHLOROPROPENE								1	
ETHYL BENZENE								1.5	
METHYLENE CHLORIDE			680	NR				1	
1,1,2,2-TETRACHLOROETHANE								1.5	
TETRACHLOROETHENE								1.5	
TOLUENE								1.5	
1,1,1-TRICHLOROETHANE		200	200					1.5	
1,1,2-TRICHLOROETHANE								1.5	
TRICHLOROETHENE		5	NR					1.5	
VINYL CHLORIDE		2	NR					10	

Table 1 (cont.)

CONTAMINANT	VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)						LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
		MAXIMUM LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-GUIDANCE RELATED VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT			
ACROLEIN								100			
ACETONE								75			
ACRYLONITRILE								50			
CARBON DISULFIDE								3			
2-BUTANONE			170					(50)			
VINYL ACETATE								15			
4-METHYL-2-PENTANONE								(3)			
2-HEXANONE								(50)			
STYRENE			140					1			
XYLENE, TOTAL			440					2			
SEMI-VOLATILE ORGANIC COMPOUNDS											
ANILINE								1.5			
BIS(2-CHLOROETHYL) ETHER								1.5			
PHENOL								2			
2-CHLOROPHENOL								2			
1,3-DICHLOROBENZENE			620					2			
1,4-DICHLOROBENZENE		75	75					2			
1,2-DICHLOROBENZENE			620					2.5			
BENZYL ALCOHOL								2			
BIS(2-CHLOROISOPROPYL) ETHER								2.5			
2-METHYLPHENOL								1			
HEXAChLOROETHANE								2			
N-NITROSODI PROPYLAMINE								1.5			
NITROBENZENE								2.5			
4-METHYLPHENOL								1			

Table 1 (cont.)

CONTAMINANT	LABORATORY QUALITY CONTROL DATA (ppb)							COMMENTS
	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	
SEMI-VOLATILE ORGANIC COMPOUNDS								
ISOPHORONE						2.5		
2-NITROPHENOL						2		
2,4-DIMETHYLPHENOL						2		
BIS(2-CHLOROETHOXY)METHANE						2.5		
2,4-DICHLOROPHENOL						2		
1,2,4-TRICHLOROBENZENE						2		
NAPHTHALENE						2		
4-CHLOROANILINE						2		
HEXACHLOROBUTADIENE						2.5		
BENZOIC ACID						(30)		
2-METHYLNAPHTHALENE						2		
4-CHLORO-3-METHYLPHENOL						1.5		
HEXACHLOROCYCLOPENTADIENE						2		
2,4,6-TRICHLOROPHENOL						1.5		
2,4,5-TRICHLOROPHENOL	10	52				1.5		
2-CHLORONAPHTHALENE						1.5		
ACENAPHTHYLENE						1.5		
DIMETHYL PHTHALATE						1.5		
2,6-DINITROTOLUENE						1		
ACENAPHTHENE						1.5		
3-NITROANILINE						2.5		
DIBENZOFURAN						1		
2,4-DINITROPHENOL						(15)		
2,4-DINITROTOLUENE						1		

Table 1 (cont.)

CONTAMINANT	SEMI-VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)						LABORATORY QUALITY			COMMENTS
		MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT			
FLUORENE								1			
4-NITROPHENOL								1.5			
4-CHLOROPHENYL PHENYL ETHER								1			
DIETHYL PHTHALATE								1			
4,6-DINITRO-2-METHYLPHENOL								(15)			
1,2-DIPHENYLHYDRAZINE								1			
N-NITROSDIPHENYLAMINE											
DIPHENYLAMINE								1.5			
4-NITROANILINE								3			
4-BROMOPHENYL PHENYL ETHER								1.5			
HEXACHLOROBENZENE			NR					1.5			
PENTACHLOROPHENOL			220					2			
PHENANTHRENE								1			
ANTHRACENE								2.5			
DI-n-BUTYL PHTHALATE								2			
FLUORANTHENE								1.5			
PYRENE								1.5			
BUTYL BENZYL PHTHALATE								3.5			
CHRYSENE											
BENZO(a) ANTHRACENE								1.5			
BIS(2-ETHYLHEXYL) PHTHALATE	4B						DB				
DI-n-OCTYL PHTHALATE								1			
BENZO(b) FLUORANTHENE								1.5			
BENZO(k) FLUORANTHENE											
BENZO(a) PYRENE								1.5			
								2			

Table 1 (cont.)

CONTAMINANT	SEMIVOLATILE ORGANIC COMPOUNDS	LABORATORY QUALITY CONTROL DATA (ppb)						COMMENTS	
		CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT
INDENO(1,2,3-cd) PYRENE								3.5	
DIBENZO(a,h) ANTHRACENE								2.5	
BENZO(g,h,i) PERYLENE								4	
2-NITROANILINE								1	
PESTICIDES AND PCB'S									
ALDRIN							0.005		
alpha BHC							(0.010)		
beta BHC							(0.005)		
delta BHC							(0.005)		
gama BHC (LINDANE)		4	2	NR			0.005		
CHLORDANE							(0.020)		
4,4'-DDD							(0.020)		
4,4'-DDE							(0.005)		
4,4'-DDT							0.020		
DIELDRIN							0.010		
ENDOSULFAN I							0.010		
ENDOSULFAN II							0.010		
ENDOSULFAN SULFATE							(0.10)		
ENDRIN		0.2	0.32				0.010		
ENDRIN ALDEHYDE							(0.030)		
ENDRIN KETONE				NR			(0.030)		
HEPTACHLOR				NR			0.030		
HEPTACHLOR EPOXIDE				NR			0.005		
4,4'-METHOXYCHLOR		5	340				0.020		
TOXAPHENE		100	NA				(0.25)		
PCB-1242			NA				(0.10)		

Table 1 (cont.)

CONTAMINANT	PESTICIDES AND PCB'S	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
PCB-1248				NA				(0.10)		
PCB-1254				NA				(0.10)		
PCB-1260				NA				(0.10)		
INORGANIC ANALYTES										
ALUMINUM								8.0		
ANTIMONY								2		
ARSENIC		50	50R					2		
BARIUM		1000	1500					6		
BERYLLIUM								1		
BORON								80		
CADMUM	0.42	10	5					10		
CADMUM		10	5					0.2		
CALCIUM								0.5		
CHROMIUM	10.5	50	120					8		
COBALT								6		
COPPER	126	1000				26.7 ppm		6		
IRON		50						80		
LEAD		50						2		
LEAD		50						70		
LITHIUM								1.0		
MAGNESIUM								0.1		
MANGANESE								5		
MERCURY		2	1.1					0.1		
MOLYBDENUM			150					15		
NICKEL								15		
POTASSIUM								2		

Table I (cont.)

A SURVEY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLLOWING TABLES. ONLY DETECTABLE CONCENTRATIONS ARE REPORTED. HOWEVER, IF THE COMPOUND HAS A FOOTNOTE FOLLOWING THE VALUE, CONSULT THE DEFINITION OF THE FOOTNOTE PROVIDED BELOW. ADDITIONAL QA/QC IS PROVIDED IN THE ATTACHED DATA SHEETS.

I. REPORTING UNITS

A. Organics

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - ug/kg or ppb (parts per billion)

B. Metals

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - mg/kg or ppm (parts per million)

II. DEFINITION OF FOOTNOTES TO ANALYTICAL DATA

A. Organics

FOOTNOTE	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected.
J	Indicates an estimated value.	Compound value may be semi-quantitative.
UJ	Quantitation limit is estimated due to a Quality Control (QC) protocol.	Compound was not detected.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 ng/ul in the final extract shall be confirmed by GC/MS.	Compound was confirmed by mass spectroscopy
B	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semi-quantitative if it is <5x the blank concentration (<10x the blank concentrations for common lab artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone). Compound value may be semi-quantitative.
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will <u>not</u> apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semi-quantitative.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a lab artifact.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

B. Inorganics

FOOTNOTE	DEFINITION	INTERPRETATION
<u>OLD</u> <u>NEW</u>		
E E	Estimated or not reported due to interference. See laboratory narrative.	Compound or element was not detected or value may be semi-quantitative.
S S	Analysis by Method of Standard Additions.	Value may be quantitative.
R N	Spike recoveries outside QC protocols which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be semi-quantitative.
+	Correlation coefficient for standard additions in less than 0.995. See review and laboratory narrative.	Data value may be biased.
[]	B Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ	DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J	Value is above CRDL and is an estimated value because of a QC Protocol.	Value may be semi-quantitative.
U	Compound was analyzed for but not detected.	Compound was not detected.
M	Duplicate injection precision not met.	Value may be semi-quantitative.
W	Post digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semi-quantitative.

C. Other Symbols Used

- NA Value not available due to insufficient data.
 NR Value not recommended to be calculated, since chemical has proven to be a human carcinogen.
 () Estimated value.

D. Analytical Method Qualifiers for Inorganic

"P" for ICP

"A" for Flame AA

"F" for Furnace AA

"CV" for Manual Cold Vapor AA

"AV" for Automated Cold Vapor AA

"AS" for Semi-automated Spectrophotometric

"C" for Manual Spectrophotometric

"T" for Titrimetric

"NR" if the analyte is not required to be analyzed.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Received 12-4-87
31 pages

DATE: 12/2/87

SUBJECT: Review of Region V CLP Data
Received for Revision 9-29-87

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory

TO: Data User: FIT

We have reviewed the data for the following case(s).

SITE NAME: TOWN & COUNTRY AUTO PARTS	SMO case No. 7914
EPA Data Set No. 4339	No. of Samples: 4 D.U./Activity Numbers Y905/C72100
CRL No. 87FC16S47,-S50	
SMO Traffic No. FT126-129	Hrs. Required for Review: 3.5 hr.
CLP Laboratory: ZLETON	

Following are our findings:

The review covers 4 soil sample
units for full rigor.
Calibration notices on the
following pages of the review narrative.

Maria Felisimo
12/1/87

- Data are acceptable for use.
- Data are acceptable for use with qualifications noted above.
- Data are preliminary - pending verification by Contractor Laboratory.
- Data are unacceptable.

cc: Duane Geuder, Quality Assurance Officer, EPA Support Services
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

DATA QUALIFIERS

Contractor: HigleytonCase 7914

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

Sample holding time:

All sample holding time were met.

GPC/PCP holding and GPC instrument performance all over meet our abundance. Positive All samples were within 12 hours. All toxicity check is acceptable.

Polidation:

Comparisons with $\alpha > 2.5 \text{ %D}$ space been flagged as estimated (T). The continuing publication on 8/20/87 at 10:04 instrument 5100F alpha for Z-Pentoxide a 100% RF (2.05), for positive results, results should be considered estimated (T) and for negative results, considered unassured (R). See Polidation section for more.

The following toxicity validation:

All 90 different between validation factors during the 12 hour period is greater than 1.5% in some quantitated compounds.

Validation dated 9/22/87; Compounds:

Pentoxide, Endosulfan II, 4,4-DDT, Methoxychlor, Alpha and Delta-BHC And Endosulfan.

All indicated positive. Quantitation results should be considered as estimated (T).

Reviewed by:

Lidia Feline

Phone:

353-0651

Date:

12/1/87

DATA QUALIFIERS

Contractor: Hazleton

Case

7914

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

Blank

Cinnamom 100% barren rock was noted with no
Methylphen Chloride, Acetone, and Toluene for DDT
and Bi-n-butylphthalate for BHA. All associated
positive results with concentration < 10 times
blank level were flagged as undetectable (UD).
Some others non-barren contaminant rock
W. Chloroparaffins were noted, one positive on
sample. None flagged. As immeasurable in the
method level. < 5 times blank level.

Malay Spurie NMSD:

Recreational for DDT, Acids and Part 1000
water, QC limit. For B/N 1 out of 12; outside
QC limit, RPD : for B/N 4 out of 16
for Acid 3 out of 5 outside Q.C.
limits.

Acceptable

For DDT and Part 1000s were
within QC limits. Semi-Volatile 4 out of 54;
Acid 1 out of Q.C. limits.

Reviewed by:

Willie Ellingson

Phone:

353-0651

Date:

12/1/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

CALIBRATION OUTLIERS

SEMOVOLATILE HSL COMPOUNDS

(Page 1)

CASE/SAS #

7914

CONTRACTOR

(Flag letter)

Instrument # Finn 51B	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
DATE/TIME:	3/13/87 15:58	3/14/87 13:57	3/25/87 14:40	3/27/87 10:14		
	RF %RSD *	RF %D *	RF %D *	RF %D *	RF %D *	RF %D *
Phenol						
bis(-2-Chloroethyl)Ether		54 J	33 J	48 J		
2-Chlorophenol						
1,3-Dichlorobenzene						
1,4-Dichlorobenzene						
Benzyl Alcohol		117 J	107 J	115 J		
1,2-Dichlorobenzene				"		
2-Methylphenol						
bis(2-chloroisopropyl)Ether			29 J			
4-Methylphenol						
N-Nitroso-Di-n-Propylamine			26 J			
Hexachloroethane						
Nitrobenzene						
Isophorone						
2-Nitrophenol						
2,4-Dimethylphenol						
Benzoic Acid						
bis(2-Chloroethoxy)Methane						
2,4-Dichlorophenol						
1,2,4-Trichlorobenzene						
Naphthalene						
4-Chloroaniline	67 J	94 J	73 J	88 J		
Hexachlorobutadiene						
4-Chloro-3-Methylphenol						
2-Methylnaphthalene						
Hexachlorocyclopentadiene			26 J			
2,4,6-Trichlorophenol						
2,4,5-Trichlorophenol						
2-Chloronaphthalene						
2-Nitroaniline						
Dimethyl Phthalate						
Acenaphthylene						
3-Nitroaniline		67 J	26 J	62 J		
Acenaphthene						
2,4-Dinitrophenol						
4-Nitrophenol		39 J		34 J		
Dibenzofuran						
		Blank 3/21/87 ET1A9		Blank 3/26/87		
				ET1A6 INS		
				ET1A8		
AFFECTED SAMPLES:						
Reviewer						
Initials/Date	11/11/87					

* These flags should be applied to the analytes on the sample data sheets.

8/87



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

9/29

Date Received for Review 10/14

Date Review Completed 10/19/87

To: DCM Clark

From: Zena Gold-Kaufman

Subject: Town n Country Auto

PAN: OH0523

Case # 7914

Sample Description

Organics (VOA, ABN, Pest/PCB)

Low Soil

Low Water

Drinking Water

Other

Inorganics (Metals, Cyanide)

4 _____
Low Soil

Low Water

Drinking Water

Other

Project Data Status _____

Completed!!

_____ Incomplete, awaiting: 6 org and inorg drink. water

4 org soils

FIT Data Review Findings:

* Check LOADS forms for transcription errors



Compounds were detected in sample(s); see enclosed Chemical Evaluation Form.

Book No. 6 Page No. 268

8/18



ecology and environment, inc.
CHICAGO, ILLINOIS¹

CHEMICAL EVALUATION FORM

SITE NAME: Town & Country

PAN# OH0523

DATE: 10/14/87

CASE # 7914

UNITS- mg/Kg

REVIEWER: Z6K

TOX/PERS	COMPOUND	CRDL	3-5x CRDL	746	747	748	749
	ALUMINUM						
	ANTIMONY						
	ARSENIC	2		5.4	6.1	9.1	6
	BARIUM						
	BERYLLIUM						
	CADMIUM	1		[2.4]		[2.5]	
	CHROMIUM	2		6.2	12	15	9.6
	COBALT				X		
	COPPER	5		[12]	19	33	16
	LEAD ^{LEADOK} (F)	1		8.7	525	161	79
	MERCURY	.008		0.2	0.18		
	NICKEL	8		[10]	[8.5]	[14]	[9.9]
	SELENIUM						
	SILVER						
	THALLIUM						
	TIN						
	VANADIUM	1(1)		[11]	[9.7]	[16]	[77]
	ZINC						
	CYANIDE						

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10/13/87

SUBJECT: Review of Region V CLP Data
Received for Review on 9-29-87

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thulper

TO: Data User: FIT

RECEIVED OCT 14 1987

We have reviewed the data for the following case(s).

SITE NAME: TOWN & COUNTRY AUTO PARTS SMO case No. 7914

EPA Data Set No. SF 4339 No. of Samples: 4 D.U./Activity Numbers Y905 / C72100

CRL No. 87FCI6S47-550

SMO Traffic No. MEU 746 - 749

CLP Laboratory: R M A L Hrs. Required for Review: 1 1/2

Following are our findings:

This review covers analysis of four low soils for total metals and CN. Detection limits for Sb and Se require elevation due to spikes below limits, while the Pb spike by Furnace requires lower limits of detection. All three elements are flagged as estimated. Duplicates on Mg and Mn are OK for RPD less than soil limits of $\pm 35\%$. Pb by ICP is OK.

10-9-87

DMM

- () Data are acceptable for use.
 Data are acceptable for use with qualifications noted above.
() Data are preliminary - pending verification by Contractor Laboratory.
() Data are unacceptable.

cc: Duane Geuder, Quality Assurance Officer, EPA Support Services
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

QC EXCEPTION SUMMARY REPORT

CASE # 7914
 DATA SET # SF 4339
 LAB Q.C. # 87217
 DATE: October 9, 1987

SITE Town & Country Auto MATRIX: soil
 LAB R.M.A.L. Parts CONC.: low
 REVIEWED BY Dorothy M. May

WATER SAMPLE SPK. _____
 WATER SAMPLE DUP. _____
 SOIL SAMPLE SPK. MEU 746
 SOIL SAMPLE DUP. MEU 746

Element	OVERALL CASE QC								MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC		REGIONAL QC		OTHER/COMMENTS	
	Building Time	Col Blanks	Unit Calver	Contam Calver	Prep Bbl AQU	Prep Bbl SUL	ICS %R	ICS AU SOL	SOL Dup NPD	Sul Spk. %R	AQ Dup NPD	AQ Spk %R	Ser Diln AU SOL	GFAA Dup	GFAA Spike	Blank	Dup NPD	Spike %R	Blank Blank	Blank Spike %R	Split Sample NPD	
Aluminum																						
Antimony																						
Arsenic																						
Boron																						
Beryllium																						
Cadmium																						
Calcium																						
Chromium																						
Cobalt																						
Copper																						
Iron																						
Lead																						
Magnesium																						
Manganese																						
Mercury																						
Nickel																						
Potassium																						
Selenium																						
Silver																						
Sodium																						
Strontium																						
Tin																						
Vanadium																						
Zinc																						
Yttrium																						

* Pb by
Furnace

1/20 Jan 1987

U.S. EPA Contract Laboratory Program
Sample Management Office
209 Madison St. - Alexandria, VA 22314
703/557-2490 PTS: 8-557-2490

Date 9-24-87

9-24-87

$$\hat{S} = \hat{S}^x + i\hat{S}^y$$

COVER PAGE

Lab Name ROCKY MOUNTAIN ANALYTICAL
SOW No. 784

Case No. 7914

CC Report No. 87217

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
MEU746D		MEU746D	MEU746D
MEU746			10-05-1007
MEU746S			MEU746S LAB
MEU747			MEU747
MEU748			MEU748
MEU749			
[MEU999]			

Comments: 4 LOW SOILS FOR TOTAL METALS AND CYANIDE ANALYSIS
SERIAL DILUTION FOR SAMPLE MEU749 IS IDENTIFIED AS [MEU999]

ICP interelement and background corrections applied? Yes X No _____
if yes, corrections applied before X or after generation of raw data.

Footnotes:

~~MR~~ - not required by contract at this time

FORM i:

Value	- If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., (10)). Indicate the method used with P (for ICP/Fame AA) or F (for furnace).
U	- indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 100).
B	- indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.
S	- indicates value determined by Method of Standard Addition.
R	- indicates spike sample recovery is not within control limits.
A	- indicates duplicate analysis is not within control limits.
C	- indicates the correlation coefficient for method of standard addition is less than 0.995
CV	- indicates Cold Vapor
AD	- indicates Automated Spectrophotometric

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Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
209 Madison St. - Alexandria, VA 22314
703/557-2490 FTS: 8-557-2490

EPA Sample No. 4
MEU746

Date 9-24-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 754
LAB SAMPLE ID. NO. -

CASE NO. 7914

QC REPORT NO. 87217

Elements Identified and Measured

Concentration: Low X Medium _____
Matrix: Water Soil X Sludge Other

mg/kg dry weight

1. <u>ALUMINUM</u>	<u>3610</u>	<u>P</u>	13. <u>MAGNESIUM</u>	<u>380000</u>	<u>F X</u>
2. <u>ANTIMONY</u>	<u>140</u>	<u>P R U J</u>	14. <u>MANGANESE</u>	<u>509</u>	<u>P X</u>
3. <u>ARSENIC</u>	<u>NW [5.4] 5.4 F</u>		15. <u>MERCURY</u>	<u>0.110</u>	<u>CV</u>
4. <u>BARIUM</u>	<u>[41]</u>	<u>P</u>	16. <u>NICKEL</u>	<u>[10]</u>	<u>P</u>
5. <u>BERYLLIUM</u>	<u>0.540</u>	<u>P</u>	17. <u>POTASSIUM</u>	<u>[490]</u>	<u>P</u>
6. <u>CADMIUM</u>	<u>2.20</u>	<u>P</u>	18. <u>SELENIUM</u>	<u>2.70</u>	<u>F R U J</u>
7. <u>CALCIUM</u>	<u>117000</u>	<u>P</u>	19. <u>SILVER</u>	<u>2.20</u>	<u>P</u>
8. <u>CHROMIUM</u>	<u>6.2</u>	<u>P</u>	20. <u>SODIUM</u>	<u>5920</u>	<u>P</u>
9. <u>COBALT</u>	<u>4.90</u>	<u>P</u>	21. <u>THALLIUM</u>	<u>5.40</u>	<u>F</u>
10. <u>COPPER</u>	<u>[12]</u>	<u>P</u>	22. <u>TIN</u>	<u>120</u>	<u>P</u>
11. <u>IRON</u>	<u>9480</u>	<u>P</u>	23. <u>VANADIUM</u>	<u>[11]</u>	<u>P</u>
12. <u>LEAD</u>	<u>8.7</u>	<u>F R U J</u>	24. <u>ZINC</u>	<u>32</u>	<u>P</u>

Cyanide 5.40 AS Percent Solids (%) 92

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager JW

Form I

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U.S. EPA Contract Laboratory Program
Sample Management Office
209 Madison St. - Alexandria, VA 22314
703/557-2490 FTS: 8-557-2490

EPA Sample No. 49b
MEU747

Date 9-24-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 7914

QC REPORT NO. 87217

Elements Identified and Measured

Concentration: Low X Medium _____
Matrix: Water Soil X Sludge _____ Other _____

mg/kg dry weight

1.	<u>ALUMINUM</u>	3266	P	13.	<u>MAGNESIUM</u>	42100	P
2.	<u>ANTIMONY</u>	140	P	R	<u>MANGANESE</u>	453	P
3.	<u>ARSENIC</u>	6.1	P	15.	<u>MERCURY</u>	0.2	CV
4.	<u>BARIUM</u>	126	P	16.	<u>NICKEL</u>	[8.5]	P
5.	<u>BERYLLIUM</u>	6.560	P	17.	<u>POTASSIUM</u>	[455]	P
6.	<u>CADMIUM</u>	[2.4]	P	18.	<u>SELENIUM</u>	2.80	P
7.	<u>CALCIUM</u>	122000	P	19.	<u>SILVER</u>	2.20	P
8.	<u>CHROMIUM</u>	12	P	20.	<u>SODIUM</u>	6060	P
9.	<u>COBALT</u>	50	P	21.	<u>THALLIUM</u>	5.60	F
10.	<u>COPPER</u>	19	P	22.	<u>TIN</u>	120	P
11.	<u>IRON</u>	7990	P	23.	<u>VANADIUM</u>	[9.7]	P
12.	<u>LEAD</u>	525	P	24.	<u>ZINC</u>	249	P

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

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Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
209 Madison St. - Alexandria, VA 22314
703/557-2490 FTS: 6-557-2490

DEPA Sample No.
MEU748

Date 8-24-67

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 7914

QC REPORT NO. 87217

Elements Identified and Measured

Concentration: Low X Medium _____
Matrix: Water _____ Soil X Sludge _____ Other _____

mg/kg dry weight

1.	<u>ALUMINUM</u>	4670	P	13.	<u>MAGNESIUM</u>	27000	P			
2.	<u>ANTIMONY</u>	190	P	R	U	J	14.	<u>MANGANESE</u>	695	P
3.	<u>ARSENIC</u>	9.1	P	15.	<u>MERCURY</u>	0.18	C			
4.	<u>BARIUM</u>	[161]	P	16.	<u>NICKEL</u>	[14]	P			
5.	<u>BERYLLIUM</u>	6.760	P	17.	<u>POTASSIUM</u>	[547]	P			
6.	<u>CADMIUM</u>	30	P	18.	<u>SELENIUM</u>	3.80	F	R	U	J
7.	<u>CALCIUM</u>	90800	P	19.	<u>SILVER</u>	30	P			
8.	<u>CHROMIUM</u>	15	P	20.	<u>SODIUM</u>	8260	P			
9.	<u>COBALT</u>	6.80	P	21.	<u>THALLIUM</u>	7.60	F			
10.	<u>COPPER</u>	33	P	22.	<u>TIN</u>	170	P			
11.	<u>IRON</u>	16500	P	23.	<u>VANADIUM</u>	[16]	P			
12.	<u>LEAD</u>	161	P	24.	<u>ZINC</u>	134	P			
	<u>Cyanide</u>	6.760	A.S.		Percent Solids (%)	86				

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

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Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 269 Madison St. - Alexandria, VA 22314
 703/557-2490 FTS: 8-557-2490

EPA Sample No.
 MEU749

Date 9-24-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
 SOW NO. 784
 LAB SAMPLE ID. NO. -

CASE NO. 7914QC REPORT NO. 87217Elements Identified and Measured

Concentration: Low X Medium _____
 Matrix: Water Soil X Sludge Other

mg/kg dry weight

1. <u>ALUMINUM</u>	<u>2510</u>	P	13. <u>MAGNESIUM</u>	<u>45600</u>	P <u>X</u>
2. <u>ANTIMONY</u>	<u>140</u>	P R UJ	14. <u>MANGANESE</u>	<u>367</u>	P <u>X</u>
3. <u>ARSENIC</u>	<u>6</u>	F	15. <u>MERCURY</u>	<u>0.110</u>	CV
4. <u>BARIUM</u>	<u>[32]</u>	P	16. <u>NICKEL</u>	<u>[9.9]</u>	P
5. <u>BERYLLIUM</u>	<u>0.550</u>	P	17. <u>POTASSIUM</u>	<u>[348]</u>	P
6. <u>CADMIUM</u>	<u>[2.5]</u>	P	18. <u>SELENIUM</u>	<u>2.70</u>	P R UJ
7. <u>CALCIUM</u>	<u>119000</u>	P	19. <u>SILVER</u>	<u>2.20</u>	P
8. <u>CHROMIUM</u>	<u>9.6</u>	P	20. <u>SODIUM</u>	<u>5990</u>	P
9. <u>COBALT</u>	<u>4.90</u>	P	21. <u>THALLIUM</u>	<u>5.50</u>	F
10. <u>COPPER</u>	<u>16</u>	P	22. <u>TIN</u>	<u>120</u>	P
11. <u>IRON</u>	<u>8630</u>	P	23. <u>VANADIUM</u>	<u>[7.7]</u>	P
12. <u>LEAD</u>	<u>79</u>	P	24. <u>ZINC</u>	<u>63</u>	P
Cyanide	<u>0.550</u>	AS	Percent Solids (%)	91	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager JW

Matrix 5015

SIINA

DATE 9-24-87

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797 ON CASE

LAB TIME RECORD

— 1 —

2 / 1

4308

1. *W. m. 2.5% - 3.5% - 4.5% - 5.5% - 6.5%*

117

10. The following table gives the number of cases of smallpox reported in each State during the year 1802.

—CEI

10. The following table gives the number of cases of smallpox reported in each State during the year 1802.

88

10. The following table gives the number of hours per week spent by students in various activities.

• 481

10. The following table gives the number of hours per week spent by students in various activities.

• 4-1

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Form III

Q.C. Report No. 87A17

BLAKES

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Form III

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2 of 3

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Form IIIQ.C. Report No. 87217

BLANKS

LAB NAME ROCKY MOUNTAIN ANALYTICAL
DATE 9-24-87CASE NO. 7914
UNITS ug/L

RECEIVED OCT 14 1987

Matrix SOIL

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration				Preparation Blank	
		1	2	3	4	1	2
Metals:							
1. ALUMINUM	150	150				150	
2. ANTIMONY	250	250				250	
3. ARSENIC	10u	10u	10u			10u	
4. BARIUM	30	30				30	
5. BERYLLIUM	10	10				10	
6. CADMIUM	40	40				40	
7. CALCIUM	1790	1790				1790	
8. CHROMIUM	40	40				40	
9. COBALT	90	90				90	
10. COPPER	60	60				60	
11. IRON	240	240				240	
12. LEAD	200	200				200	
13. MAGNESIUM	1530	1530				1530	
14. MANGANESE	[4.2]	40				40	
15. MERCURY	0.24	0.24				0.24	
16. NICKEL	80	80				80	
17. POTASSIUM	1750	1750				1750	
18. SELENIUM	5u	5u	5u			5u	
19. SILVER	40	40				40	
20. SODIUM	10900	10900				10900	
21. THALLIUM	10u	10u	10u			10u	
22. TIN	220	220				220	
23. VANADIUM	70	70				70	
24. ZINC	30	30				[4]	
Other:							
Cyanide	10u	10u	10u			10u	

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1 of 2
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Form V

Q.C. Report No. 87217

SPIKE SAMPLE RECOVERY

LAB NAME ROCKY MOUNTAIN ANALYTICAL

DATE 9-24-87

CASE NO. 7914

EPA Sample No. MEU746

Lab Sample ID No. -

Units mg/kg

MATRIX SOIL

Compound	Control Limit	Spiked Sample	Sample	Spike	%R
	%R	Result (SSR)	Result (SR)	Added (SA)	%R
Metals:					
1. ALUMINUM	75-125	3660	3320	NR	
2. ANTIMONY	75-125	140	120	250	56 R
3. ARSENIC	75-125	24	[5]	20	95
4. BARIUM	75-125	963	[38]	1000	92
5. BERYLLIUM	75-125	24	0.50	25	96
6. CADMIUM	75-125	25	20	25	100
7. CALCIUM	75-125	117000	107000	NR	
8. CHROMIUM	75-125	103	5.7	100	97
9. COBALT	75-125	237	4.50	250	95
10. COPPER	75-125	131	[11]	125	96
11. IRON	75-125	7470	8720	NR	
12. LEAD	75-125	22 S	6.0	10	140 R(F)
13. MAGNESIUM	75-125	35000	35000	NR	
14. MANGANESE	75-125	722	466	250	102
15. MERCURY	75-125	0.48	0.10	0.5	96
16. NICKEL	75-125	241	[9.4]	250	93
17. POTASSIUM	75-125	[568]	[451]	NR	
18. SELENIUM	75-125	3.4	2.50	5	68 R
19. SILVER	75-125	28	20	25	112
20. SODIUM	75-125	5450	5450	NR	
21. THALLIUM	75-125	22	50	25	88
22. TIN	75-125	229	110	250	92
23. VANADIUM	75-125	254	[9.7]	250	98
24. ZINC	75-125	200	30	250	92
Other:					
Cyanide	75-125	4.1	50	5	82

* %R = [(SSR - SR)/SA] x 100

"R" - out of control

Comments: S - DETERMINED by msa

2 of 2

Form VQ.C. Report No. 87217

SPIKE SAMPLE RECOVERY

RECEIVED OCT 14 1987
000014LAB NAME ROCKY MOUNTAIN ANALYTICALCASE NO. 7914
EPA Sample No. MEU746
Lab Sample ID No. -
Units mg/kgDATE 9-24-87MATRIX Soil

Compound	Control Limit: %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R ¹
Metals:					
1. <u>ALUMINUM</u>	75-125				
2. <u>ANTIMONY</u>	75-125				
3. <u>ARSENIC</u>	75-125				
4. <u>BARIUM</u>	75-125				
5. <u>BERYLLIUM</u>	75-125				
6. <u>CADMIUM</u>	75-125				
7. <u>CALCIUM</u>	75-125				
8. <u>CHROMIUM</u>	75-125				
9. <u>COBALT</u>	75-125				
10. <u>COPPER</u>	75-125				
11. <u>IRON</u>	75-125				
12. <u>LEAD</u>	75-125	245	73.10 ⁴⁵	250	98
13. <u>MAGNESIUM</u>	75-125				
14. <u>MANGANESE</u>	75-125				
15. <u>MERCURY</u>	75-125				
16. <u>NICKEL</u>	75-125				
17. <u>POTASSIUM</u>	75-125				
18. <u>SELENIUM</u>	75-125				
19. <u>SILVER</u>	75-125				
20. <u>SODIUM</u>	75-125				
21. <u>THALLIUM</u>	75-125				
22. <u>TIN</u>	75-125				
23. <u>VANADIUM</u>	75-125				
24. <u>ZINC</u>	75-125				
Other:					
Cyanide	75-125				

¹ %R = [(SSR - SR)/SA] x 100

"R"- out of control

Comments: _____

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Form VI

000015

Q.C. Report No. 87217

DUPLICATES

LAB NAME ROCKY MOUNTAIN ANALYTICALDATE 9-24-87CASE NO. 7914EPA Sample No. MEU746Lab Sample ID No. -Units mg/kgMatrix SOIL

Compound	Control Limit	Sample(S)	Duplicate(D)	RPD ^a
Metals:				
1. ALUMINUM		3320	2980	11
2. ANTIMONY		120	120	NC
3. ARSENIC		[5]	[5]	NC
4. BARIUM		[38]	[33]	NC
5. BERYLLIUM		0.50	0.50	NC
6. CADMIUM		20	20	NC
7. CALCIUM		107000	89400	18
8. CHROMIUM		5.7	6.7	16
9. COBALT		4.50	4.50	NC
10. COPPER		[11]	[9.6]	NC
11. IRON		8720	7300	17
12. LEAD		6.0	6.0	0
13. MAGNESIUM		35000	25000	33
14. Manganese		466	371	23
15. MERCURY		0.10	0.10	NC
16. NICKEL		[9.4]	[13]	NC
17. POTASSIUM		[451]	[440]	NC
18. SELENIUM		2.50	2.50	NC
19. SILVER		20	20	NC
20. SODIUM		5450	5450	NC
21. THALLIUM		50	50	NC
22. TIN		110	110	NC
23. VANADIUM		[9.7]	[9.4]	NC
24. ZINC		50	20	14
Other: <u>90 SOLIDS</u>		92	92	0
Cyanide		50	50	NC

^a Out of Control^b To be added at a later date.

NC - Non calculable RPD due to value(s) less than CRDL

$$\text{RPD} = [(S-D)/((S+D)/2)] \times 100$$

2 of 2

RECEIVED OCT 14 1987
000016Form VIQ.C. Report No. 87217

DUPLICATES.

LAB NAME ROCKY MOUNTAIN ANALYTICALCASE NO. 7914
EPA Sample No. MED746
Lab Sample ID No. -
Units mg/kgDATE 9-24-87MATRIX Soil

Compound	Control Limit ¹	Sample(S)	Duplicate(D)	RPD ²
Metals:				
1. ALUMINUM				
2. ANTIMONY				
3. ARSENIC				
4. BARIUM				
5. BERYLLIUM				
6. CADMIUM				
7. CALCIUM				
8. CHROMIUM				
9. COBALT				
10. COPPER				
11. IRON				
12. LEAD		7.35104	15	NC (P)
13. MAGNESIUM				
14. MANGANESE				
15. MERCURY				
16. NICKEL				
17. POTASSIUM				
18. SELENIUM				
19. SILVER				
20. SODIUM				
21. THALLIUM				
22. TIN				
23. VANADIUM				
24. ZINC				
Other:				
Cyanide				

X Out of Control

¹ To be added at a later date.² RPD = [(|S-D|/((S+D)/2)) x 100

NC - Non calculable RPD due to value(s) less than CRDL

1 of 2
000017

Form VII

Q.C. Report No. 87217
INSTRUMENT DETECTION LIMITS AND
LABORATORY CONTROL SAMPLE

RECEIVED OCT 14 1987

LAB NAME ROCKY MOUNTAIN ANALYTICAL
DATE 9-24-87

CASE NO 7914

UNITS ug/L

Compound	Required Detection	Instrument Detection	Lab Control Sample				
	Limits (CRDL)-ug/l	Limits (IDL)-ug/l	ICP/AA	Furnace	True	Found	%R
Metals:							
1. ALUMINUM	200	15			1980	2000	101
2. ANTIMONY	50	25			1910	1989	96
3. ARSENIC	10	31		2	149	146	94
4. BARIUM	200	3			1980	1800	94
5. BERYLLIUM	5	1			1481	1479	100
6. CADMIUM	5	4			1489	1459	94
7. CALCIUM	5000	179			149800	149800	100
8. CHROMIUM	10	4			1506	1485	96
9. COBALT	50	9			1474	1473	100
10. COPPER	25	6			1542	1534	96
11. IRON	100	24			1990	1970	99
12. LEAD	5	20		1	14510	14100	91
13. MAGNESIUM	5000	153			125000	123900	95
14. MANGANESE	15	4			1513	1495	97
15. MERCURY	0.2			0.2CV	11.0	11.03	103
16. NICKEL	40	8			1496	1461	93
17. POTASSIUM	5000	175			150200	149000	98
18. SELENIUM	5			1	198	196	98
19. SILVER	10	4			1509	1412	81
20. SODIUM	5000	1090			150700	149300	97
21. THALLIUM	10			1	197	188	91
22. TIN	40	22			120000	11980	99
23. VANADIUM	50	7			1511	1501	98
24. ZINC	20	3			13100	12750	89
Other:							
Cyanide		10			10AS	158	158

CV - Cold Vapor

AS - Automated Spectrophotometric

2 of 2

000018

Form VII

Q.C. Report No. 87217
 INSTRUMENT DETECTION LIMITS AND
 LABORATORY CONTROL SAMPLE

RECEIVED OCT 14 1987

LAB NAME ROCKY MOUNTAIN ANALYTICAL
 DATE 9-24-87

CASE NO 7914
 UNITS ug/L

Compound	Required Detection		Instrument Detection		Lab Control Sample		
	Limits (CRDL)-ug/l	Limits (IDL)-ug/l	ICP/AA	Furnace	True	Found	%R
Metals:							
1. ALUMINUM	200	15			1980		
2. ANTIMONY	60	25			1090		
3. ARSENIC	10	31	2		49		
4. BARIUM	200	3			1980		
5. BERYLLIUM	5	1			481		
6. CADMIUM	5	4			489		
7. CALCIUM	5000	179			49800		
8. CHROMIUM	10	4			506		
9. COBALT	50	9			474		
10. COPPER	25	6			542		
11. IRON	100	24			1990		
12. LEAD	5	20	1		4510 98: 84		
13. MAGNESIUM	5000	153			25000		
14. MANGANESE	15	4			513		
15. MERCURY	.2			0.2CV	1.0		
16. NICKEL	40	8			496		
17. POTASSIUM	5000	175			50200		
18. SELENIUM	5		1		98		
19. SILVER	10	4			509		
20. SODIUM	5000	1090			50700		
21. THALLIUM	10		1		97		
22. TIN	40	22			2000		
23. VANADIUM	50	7			511		
24. ZINC	20	3			3100		
Other:							
Cyanide	10			10AS			

CV - Cold Vapor

AS - Automated Spectrophotometric

SUPERFUND 43
CASE NUMBER/SAS No. 7914

CASE NUMBER/SAS No. 1-19

**CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS**

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY

SAMPLE NUMBER: 811877910
LOG-IN DATE: 9/11/87
DUE DATE: 10/27/87

SUPERFUND DU NUMBER

EPA RPM or OSC (S.M.S.)/(CES)

CERCLIS NUMBER DHS/05530816

DATE SHIPPED 8/10/07

PAGE OF ~~2~~



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

CRL Receipt Date 9-27-87 FIT Receipt Date 12-4-87 Review Completed 12-7-87

TO: Don Clark

FROM: Jim Mertes

SUBJECT: Town + Country Auto Parts

PAN: OH 0523

CASE # 7914/3648E

Sample Description

Organics (VOA, ABN, Pest/PCB)

4 Low Soil

 Low Water

 Drinking Water

 Other

Inorganics (Metals, Cyanide)

Low Soil

 Low Water

 Drinking Water

 Other

Project Data Status

X

Completed!!

 Incomplete, awaiting:

FIT Data Review Findings:

No compds. were detected >5x the d. limit.

Individual detection limits should be read off the OADS form for each sample. TIC's were found in each sample.

Check Data Sheets for Transcription Errors

X Compounds were detected in sample(s); see enclosed sheet.

Book No. 6 Page No. 268
26U:001

Date Sampled 8-19-87

I'm charged to
above per weekend
12-12-87 Q. J.M.

Town & Country Amb PARTS
Case #

COMPOUND	SAMPLE	DET. LIMIT	Amb			
			ET126	ET127	ET128	ET129
dimethyl phthalate						
acenaphthylene		390		45J		
3-nitroaniline						
acenaphthene						
2,4-dinitrophenol						
4-nitrophenol						
dibenzofuran						
2,4-dinitrotoluene						
2,6-dinitrotoluene						
diethylphthalate						
4-chlorophenyl-phenylether						
fluorene						
4-nitroaniline						
4,6-dinitro-2-methylphenol						
N-nitrosodiphenylamine						
4-bromophenyl-phenylether						
hexachlorobenzene						
pentachlorophenol						
phenanthrene		390		43J	85J	
anthracene		390		64J		
di-n-butylphthalate		390	740B	5004J	2204J	
fluoranthene		390		200J	400J	
benzidine		390		150		
pyrene		390		140J	270J	
butylbenzylphthalate		390			18004J	
3,3'-dichlorobenzidine						
benzo(a)anthracene						
bis(2-ethylhexyl)phthalate		520		360J	650	
chrysene		520		180J	150J	
di-n-octylphthalate						
benzo(b&k)fluoranthene		520		240J		
benzo(a)pyrene		520		210J	84J	
indeno(1,2,3-cd)pyrene						
dibenzo(a,h)anthracene						
benzo(q,h,i)perylene						
alpha-BHC						
beta-BHC						
delta-BHC						
gamma-BHC(lindane)						
heptachlor						
aldrin						
heptachlor epoxide						
endosulfan I						
dieldrin						
4,4'-DDE						
endrin						
endosulfan II						
4,4'-DDD						
endrin aldehyde						
endosulfan sulfate						
4,4'-DDT		37		D.L. = 37 710		
methoxychlor						
endrin ketone						
chlordan						
toxaphene						
Aroclor-1016						
Aroclor-1221						
Aroclor-1232						
Aroclor-1242						
Aroclor-1248						
Aroclor-1254						
Aroclor-1260						

1100 D.L. = 620480 D.L. = 480

Town & Country Auto Parts
Case #

SAMPLE	DET. LIMIT	ppb	↗			
			ET 126	ET 127	ET 128	ET 129
chloromethane						
bromomethane						
vinyl chloride						
chloroethane						
methylene chloride	11	64J	94J	204J	124J	
acetone	11	284J	274J	524J	804J	
carbon disulfide						
1,1-dichloroethene						
1,1-dichloroethane						
trans-1,2-dichloroethylene						
chloroform		8	2BJ	24J	BB	3BJ
1,2-dichloroethane						
2-butanone		8	1J	2J	2J	6J
1,1,1-trichloroethane						
carbon tetrachloride						
vinyl acetate						
bromodichloromethane						
1,1,2,2-tetrachloroethane						
1,2-dichloropropane						
trans-1,3-dichloropropene						
trichloroethene						
dibromochloromethane						
1,1,2-trichloroethane						
benzene						
cis-1,3-dichloropropene						
2-chloroethylvinylether						
bromoform						
2-hexanone						
4-methyl-2-pentanone						
tetrachloroethene	6		4J	1J		
toluene	6		2BJ	4UT	2BJ	
chlorobenzene						
ethylbenzene	6			2J		
styrene						
total xylenes		8		1J		
N-nitrosodimethylamine						
phenol		310				130J
eniline						
bis(2-chloroethyl)ether						
2-chlorophenol						
1,3-dichlorobenzene						
1,4-dichlorobenzene						
benzyl alcohol						
1,2-dichlorobenzene						
2-methylphenol						
bis(2-chloroisopropyl)ether						
4-methylphenol						
N-nitroso-di-n-propylamine						
hexachloroethane						
nitrobenzene						
isophrone						
2-nitrophenol						
2,4-dimethylphenol						
benzoic acid						
bis(2-chloroethoxy)methane						
2,4-dichlorophenol						
1,2,4-trichlorobenzene						
neptahlene						
4-chloroaniline						
hexachlorobutadiene						
4-chloro-3-methylphenol						
2-methylnaphthalene						
hexachlorocyclopentadiene					-	
2,4,6-trichlorophenol						
2,4,5-trichlorophenol						
2-chloronaphthalene						

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS

Page 2

CASE/SAS #

7914

CONTRACTOR

Mayerton

Instrument # Fis. 51B	Init. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
DATE/TIME:	RF	%RSD *	RF	%D *	RF	%D *	RF	%D *	RF	%D *
2,4-Dinitrotoluene										
2,6-Dinitrotoluene										
Diethylphthalate										
4-Chlorophenyl-phenylether										
Fluorene										
4-Nitroaniline					220	J			180	J
4,6-Dinitro-2-Methylphenol							39	J		
N-Nitrosodiphenylamine										
4-Bromophenyl-phenylether										
Hexachlorobenzene										
Pentachlorophenol										
Phenanthrene										
Anthracene										
Di-n-Butylphthalate										
Fluoranthene										
Pyrene										
Butylbenzylphthalate										
Benz(a)Anthracene										
bis(2-Ethylhexyl)Phthalate										
Chrysene										
Di-n-Octyl Phthalate										
Benz(b)Fluoranthene										
Benz(k)Fluoranthene										
Benz(a)Pyrene										
Indeno(1,2,3-cd)Pyrene										
Dibenz(a,h)Anthracene										
Benz(d,g,h,i) Perylene										

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: M.F. 11/30/87

8/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 79/4CONTRACTOR Hazleton

Instrument # <u>5100A</u>	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
DATE/TIME:	8/3/87 8:55	8/19/87 8:55	8/20/87 10:04			
	RF %RSD *	RF %D *	RF %D *	RF %D *	RF %D *	RF %D *
Chloromethane			26 J			
Bromomethane						
Vinyl Chloride						
Chloroethane			30 J			
Methylene Chloride	40 J		20 J			
Acetone	66 J					
Carbon Disulfide			330 J	410 J		
1,1-Dichloroethane						
1,1-Dichloroethene						
Trans-1,2-Dichloroethene						
Chloroform						
2-Butanone	47 J	38 J	042	RF		
1,2-Dichloroethane						
1,1,1-Trichloroethane						
Carbon Tetrachloride						
Vinyl Acetate		180 J	150 J			
Bromodichloromethane						
1,2-Dichloropropane						
Trans-1,3-Dichloropropene						
Trichloroethene						
Dibromochloromethane						
1,1,2-Trichloroethane						
Benzene						
cis-1,3-Dichloropropene						
2-Chloroethylvinylether						
Bromoform						
4-Methyl-2-Pentanone		38 J				
2-Hexanone		48 J				
Tetrachloroethene						
1,1,2,2-Tetrachloroethane		34 J	26 J			
Toluene						
Chlorobenzene						
Ethylbenzene						
Styrene						
m-Xylene						
o/p-Xylene						
AFFECTED SAMPLES:						
Reviewer's Initials/Date:						

Hatched Block: M. Chauhan
 ET116 ET147
 ET148
 ET149
 ET149.5
 ET149.5B

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
 CALIBRATION OUTLIERS
 SEMIVOLATILE HSL COMPOUNDS

(Page 1)

CASE/SAS #

9714

CONTRACTOR

Kleysten

Instrument # 44PS9.35	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.						
DATE/TIME:	2/24/87 10:35	9/2/87 4:52										
	RF	%RSD *	RF	%D *	RF	%D *	RF	%D *	RF	%D *	RF	%D *
Phenol												
bis(-2-Chloroethyl)Ether												
2-Chlorophenol												
1,3-Dichlorobenzene												
1,4-Dichlorobenzene												
Benzyl Alcohol					78	J						
1,2-Dichlorobenzene												
2-Methylphenol												
bis(2-chloroisopropyl)Ether					51	J						
4-Methylphenol												
N-Nitroso-Di-n-Propylamine					76	J						
Hexachloroethane												
Nitrobenzene					54	J						
Isophorone					31	J						
2-Nitrophenol												
2,4-Dimethylphenol												
Benzoic Acid					56	J						
bis(2-Chloroethoxy)Methane					30	J						
2,4-Dichlorophenol												
1,2,4-Trichlorobenzene												
Naphthalene												
4-Chloroaniline												
Hexachlorobutadiene					28	J						
4-Chloro-3-Methylphenol												
2-Methylnaphthalene												
Hexachlorocyclopentadiene												
2,4,6-Trichlorophenol												
2,4,5-Trichlorophenol												
2-Chloronaphthalene												
2-Nitroaniline					47	J						
Dimethyl Phthalate												
Acenaphthylene												
3-Nitroaniline					27	J						
Acenaphthene												
2,4-Dinitrophenol												
4-Nitrophenol					38	J						
Dibenzofuran												
					Blank 3/28/87							
AFFECTED SAMPLES:												
Reviewer:												
Initials/Date:	11/10/87											

* These flags should be applied to the analytes on the sample data sheets.

8/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
 CALIBRATION OUTLIERS
 SEMIVOLATILE HSL COMPOUNDS

Page 2

CASE/SAS # 1914CONTRACTOR Hazletown

Instrument # <u>HP 5873</u>	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.						
DATE/TIME:	2/24/87	9/2/87 9:52										
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene				39	J							
2,6-Dinitrotoluene				28	J							
Diethylphthalate				35	J							
4-Chlorophenyl-phenylether												
Fluorene												
4-Nitroaniline												
4,6-Dinitro-2-Methylphenol												
N-Nitrosodiphenylamine												
4-Bromophenyl-phenylether												
Hexachlorobenzene												
Pentachlorophenol												
Phenanthrene												
Anthracene												
Di-n-Butylphthalate												
Fluoranthene												
Pyrene												
Butylbenzylphthalate												
Benzo(a)Anthracene												
bis(2-Ethylhexyl)Phthalate												
Chrysene												
Di-n-Octyl Phthalate												
Benzo(b)Fluoranthene												
Benzo(k)Fluoranthene												
Benzo(a)Pyrene												
Indeno(1,2,3-cd)Pyrene												
Dibenz(a,h)Anthracene												
Benzo(g,h,i) Perylene												

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: M.F. 11/30/87

8/87



HAZLETON

LABORATORIES AMERICA, INC.

3301 KINSMAN BLVD. • P.O. BOX 7545 • MADISON, WI 53707 • (608) 241-4471 • TLX 703956 HAZRAL MDS UD

September 25, 1987

RECEIVED

ST 4339

Sample Management Office
Viar and Company
300 North Lee Street
Alexandria VA 22314

Enclosed is the data package for Case No. 7914. Under this case number, we received a total of four soil samples on August 19, 1987 from Region V. All samples were analyzed and reported according to the protocols provided under our Contract No. 68-01-7146 bid lot #1.

Please note the following summary comments relating to the contractual quality control in this case:

- GC-MS Tuning. All tuning requirements for both BFB and DFTPP for samples analyzed in this case were within contract criteria.
- Instrumental Calibrations. All instrumental calibrations for all fractions analyzed were within contract criteria for both initial and continuing calibrations.
- Method Blanks. All method blanks for the volatile, semivolatile, and pesticide fractions were found to be within contract criteria.
- Surrogate Recoveries. All calculated surrogate recoveries for the volatile, semivolatile and pesticide fractions were found to be within contract criteria.

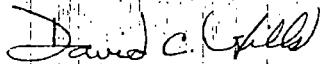
Two samples (ET126MS and ET128) required re-extraction due to noncompliant surrogate recoveries, in the semivolatile fraction. The re-extractions of both ET128 and ET126MS were performed on 8-26-87. The re-analysis of these re-extracted samples produced acceptable recoveries for all surrogates although the method blank extracted with these samples produced a recovery for 2-fluorophenol which was 7% below the acceptable criteria. The method blank (8-26-87) was reinjected and again produced the same low

recovery. A third blank has been supplied with this case demonstrating acceptable surrogate recoveries.

o Pesticide Confirmation Analysis. GC confirmation analysis of samples in this case was performed using a DB-608 Megabore Capillary Column. Please note that a 1.5% DBC shift criteria has been established by Joan Fisk when using Megabore capillary columns.

If you have any questions regarding this case or need any further clarifications, please feel free to call.

Sincerely,



David C. Hills
Manager, Environmental Analysis

DCH/sc

cc: Region V
USEPA EMSL-LV
Central File

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. 7914

Contract Laboratory

HAZLETON LABORATORIES

Contract No. 68-01-7146

Low

Medium

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

* * * ADVISORY LIMITS ONLY

Volatiles: 0 out of 24; outside of QC limits

Semi-Volatiles: 4 out of 54; outside of QC limits

Pesticides: 0 out of 7; outside of QC limits

-7185-

Comments:

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 7914

Contractor HAZLETON LABORATORIES

Contract No. 68-01-7146

Low Level ✓

Medium Level _____

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/Kg)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS*	RPD	RECOVERY
SAMPLE NO. <u>ET126</u>	VOA 1,1-Dichloroethene	56	0	39	70	36	64	9	22	59-172	
	SMO Trichloroethene		↓	57	102	54	96	6	24	62-137	
	Chlorobenzene		↓	65	116	61	109	6	21	60-133	
	Toluene		2	63	109	59	102	7	21	59-139	
	Benzene		↓	0	49	28	46	7	21	66-142	
SAMPLE NO. <u>ET126</u>	B/N 1,2,4-Trichlorobenzene	1850		650	35*	490	26*	30*	23	38-107	
	SMO Acenaphthene			1280	69	780	42	49*	19	31-137	
	Pyrene			1360	74	860	46	47	47	28-99	
	N-Nitrosodi-n-Propylamine			2380	129	1560	84	42*	36	35-142	
	1,4-Dichlorobenzene		↓	640	35*	400	22*	46*	38	41-128	
SAMPLE NO. <u>ET126</u>	ACID Pentachlorophenol	3700		450	24*	430	23*	4	27	28-104	
	SMO Phenol	1		1740	47	1160	31	41	47	17-109	
	2-Chlorophenol			2370	64	1130	31	69*	35	28-90	
	4-Chloro-3-Methylphenol			1620	44	1050	28	44	50	25-102	
	4-Nitrophenol		↓	3550	96	2230	60	46*	33	26-103	
SAMPLE NO. <u>ET126</u>	PEST Lindane	29.6	0	26.1	88	30.3	102	15	50	46-127	
	SMO Heptachlor			26.1	98	26.6	90	1.9	31	35-130	
	Aldrin		↓	17.9	60	19.2	65	7.0	43	34-132	
	Dieldrin	74.0		63.6	86	67.2	91	5.5	38	31-134	
	Endrin			75.1	101	75.1	101	0	45	42-139	
SAMPLE NO. <u>ET126</u>	4,4'-DDT.		↓	76.0	103	73.5	99	3.3	50	23-134	

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOA 0 out of 5: outside QC limits
 B/N 4 out of 6: outside QC limits
 ACID 3 out of 5: outside QC limits
 PEST 0 out of 6: outside QC limits

RECOVERY: VOA 0 out of 10: outside QC limits
 B/N 6 out of 12: outside QC limits
 ACID 0 out of 10: outside QC limits
 PEST 0 out of 12: outside QC limits

Comments:

METHOD BLANK SUMMARY

Page 1 of 2

Case No. 7914 Region 5 Contractor HAZLETON LABORATORIES Contract No. 68-01-7146

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	COND. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	COND.	UNITS	CRDL
M.BLK-1 881V108	8-19-87	VOA	SOIL	L	5100A	75-09-2	Methylene Chloride	10	µg/kg	5
						67-64-1	Acetone	10		10
						67-66-3	Chloroform	0.7J		5
						108-88-3	Toluene	0.9J		5
	↓	↓	↓	↓	↓	1066-40-6	Silanol, trimethyl-	10	↓	—
M.BLK-2 881V119	8-20-87	VOA	SOIL	L	5100A	75-09-2	Methylene Chloride	4J	µg/kg	5
						67-64-1	Acetone	11		10
						67-66-3	Chloroform	0.6J		5
						108-88-3	Toluene	0.7J		5
	↓	↓	↓	↓	↓	—	Unknown	12		—
						1066-40-6	Silanol, trimethyl-	8	↓	—
M.BLK-1 BAN954	8-25-87	BNA	SOIL	L	FINN 51B	84-74-2	Di-n-Butylphthalate	60J	µg/kg	330
	↓	↓	↓	↓	↓	3910-62-5	3-pentanol, 2,2-dimethyl-	300	↓	—
M.BLK-2 BAN971	8-27-87	BNA	SOIL	L	FINN 51B	84-74-2	Di-n-butylphthalate	51J	µg/kg	330
						85-68-7	Butylbenzylphthalate	440	µg/kg	330
	↓	↓	↓	↓	↓	—	Unknown	320		—
						—	Unknown	150		—
						—	Unknown	140		—
	↓	↓	↓	↓	↓	—	Unknown	230	↓	—

Comments:

METHOD BLANK SUMMARY

Page 2 of 2

Case No. 7914 Region 5 Contractor HAZLETON LABORATORIES Contract No. 68-01-7146

Comments:

Sample Number

ET126

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: HAZLETON LABORATORIES

Lab Sample ID No: 70803872

Sample Matrix: SOIL

Data Release Authorized By: *David C. Gile*

Case No: 7914

QC Report No:

Contract No: 68-01-7146

Date Sample Received: 8-19-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 8-19-87

Date Analyzed: 8-19-87

Conc/Dil Factor: 1 pH 7.6

Percent Moisture: (Not Decanted) 10.2
C.F.: 1.11

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	11U
74-83-9	Bromomethane	11U
75-01-4	Vinyl Chloride	11U
75-00-3	Chloroethane	11U
75-09-2	Methylene Chloride	6B uJ
67-64-1	Acetone	28B uJ
75-15-0	Carbon Disulfide	6U
75-35-4	1, 1-Dichloroethene	6U
75-34-3	1, 1-Dichloroethane	6U
156-60-5	Trans-1, 2-Dichloroethene	6U
67-68-3	Chloroform	2B J
102-08-3	1, 2-Dichloroethane	6U
78-93-3	2-Butanone	1T
71-55-6	1, 1, 1-Trichloroethane	6U
56-23-5	Carbon Tetrachloride	6U
108-05-4	Vinyl Acetate	11U
75-27-4	Bromodichloromethane	6U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	6U
10061-02-6	Trans-1, 3-Dichloropropene	6U
79-01-6	Trichloroethene	6U
124-48-1	Dibromochloromethane	6U
79-00-5	1, 1, 2-Trichloroethane	6U
71-43-2	Benzene	6U
10061-01-5	cis-1, 3-Dichloropropene	6U
110-75-8	2-Chloroethylvinylether	11U
75-25-2	Bromoform	6U
108-10-1	4-Methyl-2-Pentanone	11U
591-78-6	2-Hexanone	11U
127-18-4	Tetrachloroethene	6U
79-34-5	1, 1, 2, 2-Tetrachloroethane	6U
108-88-3	Toluene	2B J uJ
108-90-7	Chlorobenzene	6U
100-41-4	Ethylbenzene	6U
100-42-5	Styrene	6U
	Total Xylenes	6U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- Value** If the result is a value greater than or equal to the detection limit, report the value.
- U** Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U. Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.
- J** Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

- C** This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/uL in the final extract should be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other** Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Laboratory Name: HAZLETON LABORATORIES

Case No: 4914

Sample Number

ETI 26

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

Concentration: Low Medium High (Circle One)GPC Cleanup Yes No

Date Extracted/Prepared: 8-21-87

Separatory Funnel Extraction Yes

Date Analyzed: 8-25-87

Continuous Liquid-Liquid Extraction Yes

Conc/Dil Factor:

Percent Moisture (Decanted): 10.2

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	370 u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Naphthol	
105-67-9	2, 4-Dimethylphenol	
65-85-0	Benzoic Acid	1800 u
111-91-1	bis(2-Chloroethoxy)Methane	370 u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-08-2	2, 4, 6-Trichlorophenol	↓
95-95-4	2, 4, 5-Trichlorophenol	1800 u
91-58-7	2-Chloronaphthalene	370 u
88-74-4	2-Nitroaniline	1800 u
131-11-3	Dimethyl Phthalate	370 u
208-96-8	Acenaphthylene	370 u
99-09-2	3-Nitroaniline	1800 u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	370 u
51-28-5	2, 4-Dinitrophenol	1800 u
100-02-7	4-Nitrophenol	1800 u
132-64-9	Dibenzofuran	370 u
121-14-2	2, 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
88-73-7	Fluorene	↓
100-01-6	4-Nitroaniline	1800 u
534-52-1	4, 6-Dinitro-2-Methylphenol	1800 u
86-30-6	N-Nitrosodiphenylamine (1)	370 u
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	1800 u
85-01-8	Phenanthrene	370 u
120-12-7	Anthracene	370 u
84-74-2	Di-n-Butylphthalate	740 u
206-44-0	Fluoranthene	370 u
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	↓
91-94-1	3, 3'-Dichlorobenzidine	740 u
56-55-3	Benz(a)Anthracene	370 u
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benz(b)Fluoranthene	
207-08-9	Benz(k)Fluoranthene	
50-32-8	Benz(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benz(g, h, i)Perylene	↓

(1)-Cannot be separated from diphenylamine

HAZLETON LABORATORIES

Laboratory Name _____

Case No. 7914

Sample Number

ET 126

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low

Medium (Circle One)

GPC Cleanup Yes NoDate Extracted / Prepared: 8-21-87Separatory Funnel Extraction YesDate Analyzed: 9-21-87Continuous Liquid - Liquid Extraction YesConc./Dil. Factor: 1.0Percent Moisture (decanted): 10.2

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	8.9 <u>u</u>
319-85-7	Beta-BHC	8.9 <u>u</u>
319-86-8	Delta-BHC	8.9 <u>u</u>
58-89-9	Gamma-BHC (Lindane)	8.9 <u>u</u>
76-44-8	Heptachlor	8.9 <u>u</u>
309-00-2	Aldrin	8.9 <u>u</u>
1024-57-3	Heptachlor Epoxide	8.9 <u>u</u>
959-98-8	Endosulfan I	8.9 <u>u</u>
60-57-1	Dieldrin	18 <u>u</u>
72-55-9	4, 4'-DDE	18 <u>u</u>
72-20-8	Endrin	18 <u>u</u>
33213-65-9	Endosulfan II	18 <u>u</u>
72-54-8	4, 4'-DDD	18 <u>u</u>
1031-07-8	Endosulfan Sulfate	18 <u>u</u>
50-29-3	4, 4'-DDT	18 <u>u</u>
72-43-5	Methoxychlor	89 <u>u</u>
53494-70-5	Endrin Ketone	18 <u>u</u>
57-74-9	Chlordane	89 <u>u</u>
8001-35-3	Toxaphene	180 <u>u</u>
12674-11-2	Aroclor-1016	89 <u>u</u>
11104-28-2	Aroclor-1221	89 <u>u</u>
11141-16-5	Aroclor-1232	89 <u>u</u>
53469-21-9	Aroclor-1242	89 <u>u</u>
12672-29-6	Aroclor-1248	89 <u>u</u>
11097-69-1	Aroclor-1254	89 <u>u</u>
11096-82-5	Aroclor-1260	89 <u>u</u>

 V_i = Volume of extract injected (ul) V_s = Volume of water extracted (ml) W_s = Weight of sample extracted (g) V_t = Volume of total extract (ul) V_s _____ or W_s 26.9 g. dry wt. V_i 20,000 ul V_t 4.0 ul

Laboratory Name: HAZLETON LABORATORIES

Case No. 7914

Sample Number

ET.126

Organics Analysis Data Sheet
 (Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 1066-40-6	Silanol, trimethyl-	VOA	241	6 B.W.
2. 108-87-2	Z-Pentene, 4,4-dimethyl -		348	6
3. 529-34-4	Hexane, 3-methyl -	↓	392	6
4. 3910-62-5	3-Pentanol, 2,2-dimethyl -	BNA	207	230
5. 54105-61-8	Heptadecane, 2,6-dimethyl -		1942	520
6.	Unknown		1997	430
7. 51295-56-4	Dodecane, 2,6,11-trimethyl -		2047	670
8.	Unknown	↓	2118	640
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abcf

Sample Number

ET127

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: HAZLETON LABORATORIES

Lab Sample ID No: 70803873

Sample Matrix: SOIL

Data Release Authorized By: Dawn C. Schell

Case No: 7914

QC Report No:

Contract No: 68-01-7146

Date Sample Received: 8-19-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 8-20-87

Date Analyzed: 8-20-87

Conc/Dil Factor: 1 pH 7.7

Percent Moisture: (Not Decanted) 13.9

C.F. 1.16

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	12U
74-83-9	Bromomethane	12U
75-01-4	Vinyl Chloride	12U
75-00-3	Chloroethane	12U
75-09-2	Methylene Chloride	9.7B.UJ
67-64-1	Acetone	27B.UJ
75-15-0	Carbon Disulfide	6U
75-35-4	1, 1-Dichloroethene	6U
75-34-3	1, 1-Dichloroethane	6U
156-60-5	Trans-1, 2-Dichloroethene	6U
67-68-3	Chloroform	2.8B.J.UJ
107-06-2	1, 2-Dichloroethane	6U
78-93-3	2-Butanone	2 J
71-55-8	1, 1, 1-Trichloroethane	6U
56-23-5	Carbon Tetrachloride	6U
108-05-4	Vinyl Acetate	12U
75-27-4	Bromodichloromethane	6U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	6U
10061-02-6	Trans-1, 3-Dichloropropene	6U
79-01-6	Trichloroethene	6U
124-48-1	Dibromochloromethane	6U
79-00-5	1, 1, 2-Trichloroethane	6U
71-43-2	Benzene	6U
10061-01-5	cis-1, 3-Dichloropropene	6U
110-75-8	2-Chloroethylvinylether	12 U
75-25-2	Bromoform	6U
108-10-1	4-Methyl-2-Pentanone	12 U
591-78-6	2-Hexanone	12U
127-18-4	Tetrachloroethene	4 J
79-34-5	1, 1, 2, 2-Tetrachloroethane	6 U
108-88-3	Toluene	2.8J.UJ
108-90-7	Chlorobenzene	6 U
100-41-4	Ethylbenzene	6U
100-42-5	Styrene	6 U
	Total Xylenes	6 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.

Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

69.7

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/uL in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: HAZLETON LABORATORIES

Case No: 7914

Sample Number

ET127

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)GPC Cleanup Yes No

Date Extracted/Prepared: 8/23/87

Separatory Funnel Extraction Yes

Date Analyzed: 8/25/87

Continuous Liquid - Liquid Extraction Yes

Conc/Dil Factor:

Percent Moisture (Decanted) 13.9

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	390u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-84-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	↓
85-85-0	Benzoic Acid	2900u
111-91-1	bis(2-Chloroethyl)Methane	390u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	↓
95-95-4	2, 4, 5-Trichlorophenol	2000u
91-58-7	2-Chloronaphthalene	390u
88-74-4	2-Nitroaniline	2000u
131-11-3	Dimethyl Phthalate	390u
208-96-8	Acenaphthylene	45T
99-08-2	3-Nitroaniline	2000u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	390u
51-28-5	2, 4-Dinitrophenol	2000u
100-02-7	4-Nitrophenol	2000u
132-84-9	Dibenzofuran	390u
121-14-2	2, 4-Dinitrotoluene	
808-20-2	2, 6-Dinitrotoluene	
84-68-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	↓
100-01-8	4-Nitroaniline	2000u
534-52-1	4, 6-Dinitro-2-Methyphenol	2000u
86-30-6	N-Nitrosodiphenylamine (1)	390u
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	2000u
85-01-8	Phenanthrene	43J
120-12-7	Anthracene	64J
84-74-2	Di-n-Butylphthalate	1, 500 J
206-44-0	Fluoranthene	300 J
129-00-0	Pyrene	140 J
85-68-7	Butylbenzylphthalate	390u
91-94-1	3, 3'-Dichlorobenzidine	780u
56-55-3	Benz(a)Anthracene	390u
117-81-7	bis(2-Ethylhexyl)Phthalate	360 J
218-01-9	Chrysene	180 J
117-84-0	Di-n-Octyl Phthalate	390u
205-99-2	Benz(b)Fluoranthene	240J
207-08-9	Benz(k)Fluoranthene	390u
50-32-8	Benz(a)Pyrene	210J
193-39-5	Indeno(1, 2, 3-cd)Pyrene	390u
53-70-3	Dibenzo(a, h)Anthracene	
191-24-2	Benz(a, h)Perylene	

(1)-Cannot be separated from diphenylamine

HAZLETON LABORATORIES

Laboratory Name

Case No 7914

Sample Number

ET127

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low

Medium (Circle One)

8-21-87

GPC Cleanup Yes No

Date Extracted/Prepared:

9-22-87

Separatory Funnel Extraction Yes

Date Analyzed:

20 (2.0*)

Continuous Liquid - Liquid Extraction Yes

Conc/Dil Factor:

13.9

Percent Moisture (decanted):

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	190 <input type="radio"/>
319-85-7	Beta-BHC	190 <input type="radio"/>
319-86-8	Delta-BHC	190 <input type="radio"/>
58-89-9	Gamma-BHC (Lindane)	190 <input type="radio"/>
76-44-8	Heptachlor	190 <input type="radio"/>
309-00-2	Aldrin	190 <input type="radio"/>
1024-57-3	Heptachlor Epoxide	190 <input type="radio"/>
959-98-8	Endosulfan I	190 <input type="radio"/>
60-57-1	Dieldrin	370 <input type="radio"/>
72-55-9	4, 4'-DDE	370 <input type="radio"/>
72-20-8	Endrin	370 <input type="radio"/>
33213-65-9	Endosulfan II	370 <input type="radio"/>
72-54-8	4, 4'-DDD	370 <input type="radio"/>
1031-07-8	Endosulfan Sulfate	370 <input type="radio"/>
50-29-3	4, 4'-DDT	(* 100) <input type="radio"/>
72-43-5	Methoxychlor	1900 <input type="radio"/>
53494-70-5	Endrin Ketone	370 <input type="radio"/>
57-74-9	Chlordane	1900 <input type="radio"/>
8001-35-2	Toxaphene	3700 <input type="radio"/>
12674-11-2	Aroclor-1016	1900 <input type="radio"/>
11104-28-2	Aroclor-1221	1900 <input type="radio"/>
11141-16-5	Aroclor-1232	1900 <input type="radio"/>
53469-21-9	Aroclor-1242	1900 <input type="radio"/>
12672-29-6	Aroclor-1248	1900 <input type="radio"/>
11097-69-1	Aroclor-1254	3700 <input type="radio"/>
11096-82-5	Aroclor-1260	3700 <input type="radio"/>

D.L. = 37

 V_i = Volume of extract injected (ul) V_s = Volume of water extracted (ml) W_s = Weight of sample extracted (g) V_t = Volume of total extract (ul) V_s — or W_s 25.8 g. dry wt. V_i 20,000 ul V_t 4.0 ul

Laboratory Name HAZLETON LABORATORIESCase No 7914

Sample Number

ET127

Organics Analysis Data Sheet
 (Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 60-29-7	Ethane, 1,1'-oxybis-	VOA	191	6
2. 109-66-0	Pentane	↓	277	6
3. 3970-62-5	3-Pentanol, 2,2-dimethyl-	BNA	211	520
4. 3240-09-3	5-Hexen-2-one, 5-methyl-		277	620
5.	Unknown		573	310
6. 505-20-4	1,2-dithiane	13	836	220
7.	Unknown		906	220
8. 57-10-3	Hexadecanoic Acid		1357	1100
9. 10544-50-2	Sulfur - Mol.		1379	6200
10.	Unknown		1589	220
11.	Unknown		1647	280
12.	Unknown		1696	270
13.	Unknown		1896	430
14.	Unknown	↓	2025	440
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Sample Number

ET128

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: HAZLETON LABORATORIES

Lab Sample ID No: 70803874

Sample Matrix: SOIL

Data Release Authorized By: Diane C. Sjeld

Case No: 7914

QC Report No:

Contract No: 6B-01-7146

Date Sample Received: 8-19-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 8-20-87

Date Analyzed: 8-20-87

Conc/Dil Factor: 1 pH 7.6

Percent Moisture: (Not Decanted) 35.7
C.F. 1.55

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	16U
74-83-9	Bromomethane	16U
78-01-4	Vinyl Chloride	16U
75-00-3	Chloroethane	16U
75-09-2	Methylene Chloride	20 B. U.
67-64-1	Acetone	52 B. 10
75-15-0	Carbon Disulfide	8U
75-35-4	1, 1-Dichloroethene	BU
75-34-3	1, 1-Dichloroethane	BU
156-60-5	Trans-1, 2-Dichloroethene	BU
67-66-3	Chloroform	BB
107-06-2	1, 2-Dichloroethane	BU
78-93-3	2-Butanone	2 J
71-55-8	1, 1, 1-Trichloroethane	BU
56-23-5	Carbon Tetrachloride	8U
108-05-4	Vinyl Acetate	16U
75-27-4	Bromodichloromethane	BU

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	BU
10061-02-6	Trans-1, 3-Dichloropropene	BU
79-01-6	Trichloroethene	BU
124-48-1	Dibromochloromethane	BU
79-00-5	1, 1, 2-Trichloroethane	BU
71-43-2	Benzene	BU
10081-01-5	cis-1, 3-Dichloropropene	BU
110-75-8	2-Chloroethylvinylether	16U
75-25-2	Bromoform	BU
108-10-1	4-Methyl-2-Pentanone	16U
591-78-6	2-Hexanone	16U
127-18-4	Tetrachloroethene	1 J
79-34-5	1, 1, 2, 2-Tetrachloroethane	BU
108-88-3	Toluene	4 B. J. U. J.
108-90-7	Chlorobenzene	BU
100-41-4	Ethylbenzene	2 J
100-42-5	Styrene	BU
	Total Xylenes	13

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.

Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

D.L.=8

M.F.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero, (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/uL in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: HAZLETON LABORATORIES

Case No: 7914

Sample Number

ET 128

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)GPC Cleanup Yes No

Date Extracted / Prepared: 8-26-87

Separatory Funnel Extraction Yes

Date Analyzed: 8-27-87

Continuous Liquid - Liquid Extraction Yes

Conc/Dil Factor: 1

Percent Moisture (Decanted) 35.7

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	5204
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methyphenol	
821-64-7	N-Nitroso-Di-n-Propanamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isochorone	
88-75-5	2-Nitrophenol	
108-87-9	2, 4-Dimethoxyphenol	↓
65-85-0	Benzoic Acid	26004
111-91-1	bis(2-Chloroethoxy)Methane	5204
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naanthalene	
106-47-6	4-Chloraniline	
87-62-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methoxyphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	↓
95-95-4	2, 4, 5-Trichlorophenol	26004
91-58-7	2-Chloronanthalene	5204
88-74-4	2-Nitroaniline	26004
131-11-3	Dimethyl Phthalate	5204
208-96-8	Acenaphthylene	5204
99-09-2	3-Nitroaniline	26004

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	5204
51-28-5	2, 4-Dinitrophenol	26004
100-02-7	4-Nitrophenol	26004
132-64-9	Dibenzofuran	5204
121-14-2	2, 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	26004
534-52-1	4, 6-Dinitro-2-Methoxyphenol	26004
86-30-6	N-Nitrosodioxyphenylamine (1)	5204
101-58-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	26004
85-01-8	Phenanthrene	85J
120-12-7	Anthracene	5204
84-74-2	Di-n-Butylphthalate	2203B
206-44-0	Fluoranthene	410J
129-00-0	Pyrene	270J
85-68-7	Butylbenzylphthalate	1800B
91-94-1	3, 3'-Dichlorobenzidine	10004
56-55-3	BenzidylAnthracene	120J
117-81-7	bis(2-Ethylhexyl)Phthalate	650
218-01-9	Chrysene	150J
117-84-0	Di-n-Octyl Phthalate	5204
205-99-2	Benz(a)Fluoranthene	
207-08-9	Benz(b)Fluoranthene	↓
50-32-8	Benz(d)Pyrene	84J
193-39-5	Indeno[1, 2, 3-cd]Pyrene	5204
53-70-3	Dibenzo-a, h Anthracene	
191-24-2	Benzog, h (i)Perylene	↓

(1)-Cannot be separated from diphenylamine

Laboratory Name HAZLETON LABORATORIES
Case No 7914

Sample Number
ET 128

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 8-21-87
Date Analyzed: 9-22-87
Conc/Dil Factor: 5.0
Percent Moisture (decanted) 35.7

GPC Cleanup Yes No
Separatory Funnel Extraction Yes
Continuous Liquid - Liquid Extraction Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	62 U
319-85-7	Beta-BHC	62 U
319-86-8	Delta-BHC	62 U
58-89-9	Gamma-BHC (Lindane)	62 U
76-44-8	Heptachlor	62 U
309-00-2	Aldrin	62 U
1024-57-3	Heptachlor Epoxide	62 U
959-98-8	Endosulfan I	62 U
60-57-1	Dieldrin	120 U
72-55-9	4, 4'-DDE	120 U
72-20-8	Endrin	120 U
33213-65-9	Endosulfan II	120 U
72-54-8	4, 4'-DDD	120 U
1031-07-8	Endosulfan Sulfate	120 U
50-29-3	4, 4'-DDT	120 U
72-43-5	Methoxychlor	620 U
53494-70-5	Endrin Ketone	120 U
57-74-9	Chlordane	1100 U
8001-35-2	Toxaphene	1200 U
12674-11-2	Aroclor-1016	620 U
11104-28-2	Aroclor-1221	620 U
11141-16-5	Aroclor-1232	620 U
53469-21-9	Aroclor-1242	620 U
12672-29-6	Aroclor-1248	620 U
11097-89-1	Aroclor-1254	1200 U
11096-82-5	Aroclor-1260	1200 U

620 D.C.

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 19.3 g. dry wt. V_i 20,000 ul V_t 4.0 ul

Laboratory Name HAZLETON LABORATORIES
Case No. 7914

Sample Number
ET128

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 541-85-5	3-Heptanone, 5-methyl 1-	VOA	575	18
2.	Unknown	BNA	213	260
3. 109-81-5	Methane, dimethoxy-		377	1200
4.	Unknown		1255	430
5.	Unknown		1314	300
6. 51-10-3	Hexadecanoic Acid		1355	430
7.	Unknown phenol		1379	460
8.	Unknown Ester		1718	1800
9.	Unknown		1844	970
10.	Unknown		1904	660
11.	Unknown		2028	840
12.				
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29.				
30.				

Sample Number
ET129

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: HAZLETON LABORATORIES
Lab Sample ID No: 70803875
Sample Matrix: S01L

Data Release Authorized By: David C. Jels

Case No: 7914
QC Report No:
Contract No: 68-01-7146
Date Sample Received: 8-19-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 8-20-87

Date Analyzed: 8-20-87

Conc/Dil Factor: 1 pH 8.0

Percent Moisture: (Not Decanted) 9.4 C.F. 1.10

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	11U
74-83-9	Bromomethane	11U
75-01-4	Vinyl Chloride	11U
75-00-3	Chloroethane	11U
75-09-2	Methylene Chloride	12 B M
67-64-1	Acetone	130 B M
75-15-0	Carbon Disulfide	6U
75-35-4	1, 1-Dichloroethene	6U
75-34-3	1, 1-Dichloroethane	6U
156-60-8	Trans-1, 2-Dichloroethene	6U
67-66-3	Chloroform	3 B T
107-08-2	1, 2-Dichloroethane	6U
78-93-3	2-Butanone	6 J
71-55-8	1, 1, 1-Trichloroethane	6U
56-23-5	Carbon Tetrachloride	6U
108-05-4	Vinyl Acetate	11U
75-27-4	Bromodichloromethane	6U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	6U
10061-02-6	Trans-1, 3-Dichloropropene	6U
79-01-6	Trichloroethene	6U
124-48-1	Dibromochloromethane	6U
79-00-5	1, 1, 2-Trichloroethane	6U
71-43-2	Benzene	6U
10061-01-5	cis-1, 3-Dichloropropene	6U
110-75-8	2-Chloroethylvinylether	11 U
75-25-2	Bromoform	6U
108-10-1	4-Methyl-2-Pentanone	11U
591-78-8	2-Hexanone	11U
127-18-4	Tetrachloroethene	6U
79-34-5	1, 1, 2, 2-Tetrachloroethane	6U
108-88-3	Toluene	2 B T 1 X 5
108-90-7	Chlorobenzene	6U
100-41-4	Ethylbenzene	6U
100-42-5	Styrene	6U
	Total Xylenes	6U

For reporting results to EPA, the following flags and footnotes are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U- Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than or equal to 10 times the specified 10 ug/l and is

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ug/l in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name: HAZLETON LABORATORIES
Case No: 7914

Sample Number
ET 129

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 8-21-87

Date Analyzed: 8-25-87

Conc/Dil Factor: 1

Percent Moisture (Decanted) 9.4

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	130J
111-44-4	bis(2-Chlorophenyl)Ether	370u
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-84-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	↓
42-86-0	4-Ethoxyacetophenone	1800u
111-31-1	Dib(2-Chloromethoxy)Methane	170u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
108-47-8	4-Chloraniline	
87-68-3	Hexachlorobutadiene	
59-90-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylneopentylene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	↓
95-95-4	2, 4, 5-Trichlorophenol	1800u
91-58-7	2-Chloronaphthalene	370u
88-74-4	2-Nitroaniline	1800u
131-11-3	Dimethyl Phthalate	370u
208-96-8	Acenaphthylene	370u
99-09-2	3-Nitroaniline	1800u

GPC Cleanup Yes No

Separatory Funnel Extraction Yes

Continuous Liquid - Liquid Extraction Yes

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	370u
51-28-5	2, 4-Dinitrophenol	1800u
100-02-7	4-Nitrophenol	1800u
132-64-9	Dibenzofuran	370u
121-14-2	2, 4-Dinitrotoluene	
608-20-2	2, 6-Dinitrotoluene	
84-68-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	↓
100-01-8	4-Nitroaniline	1800u
534-52-1	4, 6-Dinitro-2-Methylphenol	1800u
86-30-6	N-Nitrosodiphenylamine (1)	370u
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	↓
87-86-5	Pentachlorophenol	1800u
85-01-8	Phenanthrene	370u
120-12-7	Anthracene	370u
205-44-0	Fluoranthene	770u
129-00-0	Pyrene	
36-68-7	Butylbenzylphthalate	↓
91-54-1	3, 3'-Dichlorobenzidine	770u
56-35-3	Benzene Anthracene	770u
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benz(a)bFluoranthene	
207-08-9	Benz(a)kFluoranthene	
50-32-8	Benz(a)lPyrene	
193-39-5	Indeno[1, 2, 3-cd]Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benz(a, h)Perylene	↓

(1)-Cannot be separated from diphenylamine

Laboratory Name HAZLETON LABORATORIESCase No 7914Sample Number
ET 129**Organics Analysis Data Sheet
(Page 3)****Pesticide/PCBs**Concentration Low

Medium (Circle One)

GPC Cleanup Yes NoDate Extracted/Prepared: 8-21-87Separatory Funnel Extraction YesDate Analyzed: 9-22-87Continuous Liquid - Liquid Extraction YesConc/Dil Factor: 5.0Percent Moisture (decanted) 9.4

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	44 <u>u</u>
319-85-7	Beta-BHC	44 <u>u</u>
319-86-8	Delta-BHC	44 <u>u</u>
58-89-9	Gamma-BHC (Lindane)	44 <u>u</u>
76-44-8	Heptachlor	44 <u>u</u>
309-00-2	Aldrin	44 <u>u</u>
1024-57-3	Heptachlor Epoxide	44 <u>u</u>
959-98-8	Endosulfan I	44 <u>u</u>
60-57-1	Dieldrin	88 <u>u</u>
72-55-9	4, 4'-DDE	88 <u>u</u>
72-20-8	Endrin	88 <u>u</u>
33213-65-9	Endosulfan II	88 <u>u</u>
72-54-8	4, 4'-DDD	88 <u>u</u>
1031-07-8	Endosulfan Sulfate	88 <u>u</u>
50-29-3	4, 4'-DDT	88 <u>u</u>
72-43-5	Methoxychlor	440 <u>u</u>
57-74-9	Chlordane	440 <u>u</u>
8001-35-2	Toxaphene	880 <u>u</u>
12674-11-2	Aroclor-1016	440 <u>u</u>
11104-28-2	Aroclor-1221	440 <u>u</u>
11141-16-5	Aroclor-1232	440 <u>u</u>
53469-21-9	Aroclor-1242	440 <u>u</u>
12672-29-6	Aroclor-1248	440 <u>u</u>
11097-69-1	Aroclor-1254	880 <u>u</u>
11096-82-5	Aroclor-1260	880 <u>u</u>

440 D.L.

 V_i = Volume of extract injected (ul) V_s = Volume of water extracted (ml) W_s = Weight of sample extracted (g) V_t = Volume of total extract (ul) V_s _____or W_s 27.2g dry wt. V_i 20,000 ul V_t 4.0 ul

Laboratory Name: HAZLETON LABORATORIES
Case No: 7914

Sample Number
ET129

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 1066-40-6	Silanol, trimethyl-	VOA	239	6
2. -	Unknown	↓	510	19
3.	Unknown	BNA	208	380
4.	Unknown	↓	274	410
5.	Unknown phenol	↓	1311	1900
6.	Unknown phenol	↓	1422	1200
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ecology and environment, inc.

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International Specialists in the Environment

CRL Receipt Date 9/13/87 FIT Receipt Date 10/16 Review Completed 10/21

TO: D. Clark

FROM: Zena Gold-Kaufman

SUBJECT: Town & Country Autd

PAN: OH0523

CASE # 7914/3048F

Sample Description

Organics (VOA, ABN, Pest/PCB)

_____ Low Soil

_____ Low Water

6 Drinking Water

_____ Other

Inorganics (Metals, Cyanide)

_____ Low Soil

_____ Low Water

_____ Drinking Water

_____ Other

Project Data Status _____ Completed!!

Incomplete, awaiting: GW: 40org/4inorg

6 inorg waters

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 6 Page No. 268

26U:001

Date Sampled 8/18/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10/15/87

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory

SUBJECT: Review of Region V CLP Data
Received for Review on September 13, 1987

We have reviewed the data for the following case(s).

SITE NAME Town & Country Auto Parts SMO Case No. 7914/3048E
D.U./ACTIVITY

EPA DATA SET NOSF-4339F No. OF
SAMPLES 6 NUMBERS Y905/C72100

CRL No.: 87FC16S51-S54, D54, R06

SMO

Traffic No. ET121-125, 131

CLP Laboratory: CAL Hrs. Required
for Review: 6

PAN #OH0523

Following are our findings.

Reviewed by Zina Hold-Kaufman
10/13/87

- Data are acceptable for use.
- Data are acceptable for use with qualifications noted above.
- Data are preliminary - pending verification by contractor lab.
- Data are unacceptable.

cc: Dr. Alfred Haeber/Joan Fisk/Gary Ward. EPA Support Services.
Ross K. Robeson, EMSL - LasVegas
Don Trees, CLP/Sample Management Office

Town & Country Auto Parts
SMO Case # 7914/3048E

This review covers 6 low drinking waters for full organic analysis.
Sample ET 131 is the blank; ET 125 and ET 124 are duplicates of one another.

- A - Holding Times - Acceptable
- B - Surrogates - Acceptable
Volatile: 0 out of 27; outside of QC limits
Semi-volatiles: 0 out of 72; outside of QC limits
Pesticides: 1 out of 9; outside of QC limits
- C - MS/MSD Acceptable
VOA - No VOA compounds found
Pesticides - No pesticides found
SVS - Bis(2-ethylhexyl)phthalate
3 SV TICS
- E - Calibrations - Acceptable
VOA - initial and continuing - acceptable
SV - initial and continuing - acceptable
Some comounds were outside specification with respect to RF, %D and %RSD. These compounds are so noted on the calibration outlier form.
- F - Tuning - Acceptable
LAB SENT CORRECTED
TUNING SHEET
-PS
10-15-87
ET131 could not be accounted for on any bromofluorobenzene tuning sheet. Lab was contacted and suggested that it was an oversight on their part. Sample was run on 8/24/87 at 1708. ET126 is recorded as being run at that time period. ET126 was assigned to the sampler for that site, however, sample ET126 was not sent in with this case number. The RIC for the VOAS originally lists the sample as ET126, however, this is changed to 131. Based on these pieces of information, it is the opinion of the reviewer that the lab incorrectly labeled ET131 as ET126 on the tuning sheet.
- G - Pesticides - Acceptable
Linearity - acceptable
DBC shift - acceptable
DDT retention time - acceptable

Z6K
10/13/87

USER INFORMATION SHEET

Town & Country Auto

OH0523

Sample TCL

TIC compounds

ET121 None detected VOA - none
 SV - 2 TICs

ET122 None detected VOA - none
 SV - none

ET123 None detected VOA - none
 SV - none

ET124 Tetrachloroethene = 1 ug/L VOA - none
 CRDL - 1 ug/L SV - none

ET125 Tetrachloroethene - 2 ug/L VOA - none
 CRDL - 1 ug/L SV - none

ET131 Acetone 8J ug/L VOA - 1 TIC
 Blank 2-Butanone 1J ug/L SV - 3 TICs
 Toluene 2 ug/L
 (CRDL - 1 ug/L)

Tetrachloroethene was detected above the CRDL in the 2 duplicate residential wells. Bis (2-ethyl hexyl) phthalate, a common lab artifact, was also detected.

RECEIVED OCT 16 1987

Z6K
10/13/87

PAGE 5 OF 12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 7914/3048E

CONTRACTOR CAI

Instrument #	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
DATE/TIME:	8/21/87	8/24 843				
	RF	%RSD *	RF	%D *	RF	%D *
Chloromethane						
Bromomethane						
Vinyl Chloride						
Chloroethane			30.6 T			
Methylene Chloride						
Acetone						
Carbon Disulfide						
1,1-Dichloroethane						
1,1-Dichloroethene						
Trans-1,2-Dichloroethene						
Chloroform						
2-Butanone	.023	R	.025	.025 R		
1,2-Dichloroethane						
1,1,1-Trichloroethane						
Carbon Tetrachloride						
Vinyl Acetate						
Bromodichloromethane						
1,2-Dichloropropane						
Trans-1,3-Dichloropropene						
Trichloroethene						
Dibromochloromethane						
1,1,2-Trichloroethane						
Benzene						
cis-1,3-Dichloropropene						
2-Chloroethylvinylether						
Bromoform						
4-Methyl-2-Pentanone						
2-Hexanone						
Tetrachloroethene						
1,1,2,2-Tetrachloroethane						
Toluene						
Chlorobenzene						
Ethylbenzene						
Styrene						
m-Xylene						
o/p-Xylene						
VOA BLANK						
AFFECTED	ET 113	ET 117				
SAMPLES:	ET 114	ET 117 MS				
	ET 115	ET 117 MSO				
	ET 116	ET 121				
		ET 122				
		ET 123				
		ET 124				
		ET 125				
		ET 126				
		ET 121 MS				
		ET 121 MSO				

* These flags should be applied to the analytes on the sample data sheets.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMOVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 7914 / 3048E

CONTRACTOR CAL

**AFFECTED
SAMPLES:**

Reviewer
Initials/Date: Z6K 10/8/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS

Page 2

CASE/SAS # 7914/3048ECONTRACTOR CAL

Instrument #	Init. Cal.	Cont. Cal.										
DATE/TIME:	9/1/87	9/1/87	725									
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene												
2,6-Dinitrotoluene												
Diethylphthalate												
4-Chlorophenyl-phenylether												
Fluorene												
4-Nitroaniline												
4,6-Dinitro-2-Methylphenol												
N-Nitrosodiphenylamine												
4-Bromophenyl-phenylether												
Hexachlorobenzene												
Pentachlorophenol												
Phenanthrene												
Anthracene												
Di-n-Butylphthalate												
Fluoranthene												
Pyrene												
Butylbenzylphthalate												
Benzo(a)Anthracene												
bis(2-Ethylhexyl)Phthalate												
Chrysene												
Di-n-Octyl Phthalate												
Benzo(b)Fluoranthene												
Benzo(k)Fluoranthene												
Benzo(a)Pyrene												
Indeno(1,2,3-cd)Pyrene												
Dibenz(a,h)Anthracene												
Benzo(g,h,i) Perylene												

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: ZOK 10/8/87

8/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
 CALIBRATION OUTLIERS
 SEMIVOLATILE HSL COMPOUNDS

Page 2

CASE/SAS # 7914/3048ECONTRACTOR CAL

Instrument #	Init. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
DATE/TIME:	8/29/87		8/30/87		8/30/87		8/30/87		8/30/87		8/30/87	
	RF	%RSD *	RF	%D *	RF	%D *	RF	%D *	RF	%D *	RF	%D *
2,4-Dinitrotoluene												
2,6-Dinitrotoluene												
Diethylphthalate												
4-Chlorophenyl-phenylether												
Fluorene												
4-Nitroaniline												
4,6-Dinitro-2-Methylphenol							365 J					
N-Nitrosodiphenylamine												
4-Bromophenyl-phenylether												
Hexachlorobenzene												
Pentachlorophenol												
Phenanthrone												
Anthracene												
Di-n-Butylphthalate												
Fluoranthene												
Pyrene												
Butylbenzylphthalate												
Benzo(a)Anthracene												
bis(2-Ethylhexyl)Phthalate												
Chrysene												
Di-n-Octyl Phthalate												
Benzo(b)Fluoranthene												
Benzo(k)Fluoranthene												
Benzo(a)Pyrene												
Indeno(1,2,3-cd)Pyrene												
Dibenz(a,h)Anthracene												
Benzo(g,h,i) Perylene												

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: Z6K 10/8/87

8/31

PAGE 10 OF 12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 7914 304SE

CONTRACTOR CAL

Instrument #	Init. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.	Cont. Cal.
DATE/TIME:	8/31/87	8/31/1402				
	RF	%RSD *	RF	%D *	RF	%D *
Phenol						
bis(-2-Chloroethyl)Ether						
2-Chlorophenol						
1,3-Dichlorobenzene						
1,4-Dichlorobenzene						
Benzyl Alcohol						
1,2-Dichlorobenzene						
2-Methylphenol						
bis(2-chloroisopropyl)Ether						
4-Methylphenol						
N-Nitroso-Di-n-Propylamine						
Hexachloroethane						
Nitrobenzene						
Isophorone						
2-Nitrophenol						
2,4-Dimethylphenol						
Benzoic Acid						
bis(2-Chloroethoxy)Methane						
2,4-Dichlorophenol						
1,2,4-Trichlorobenzene						
Naphthalene						
4-Chloroaniline						
Hexachlorobutadiene						
4-Chloro-3-Methylphenol						
2-Methylnaphthalene						
Hexachlorocyclopentadiene						
2,4,6-Trichlorophenol						
2,4,5-Trichlorophenol						
2-Chloronaphthalene						
2-Nitroaniline						
Dimethyl Phthalate						
Acenaphthylene						
3-Nitroaniline						
Acenaphthene						
2,4-Dinitrophenol						
4-Nitrophenol						
Dibenzofuran						
AFFECTED SAMPLES:			ET 121 MS			
			ET 121 DS			
			ET 123			
			ET 124			
Reviewer Initials/Date:	ZGK	10/8/87				

AFFECTED SAMPLES:

Reviewer
Initials/Date: ZGK 10/8/87

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V
 CALIBRATION OUTLIERS
 SEMIVOLATILE HSL COMPOUNDS

CASE/SAS # 7914 / 3046E

Page 2
 CONTRACTOR CAL

Instrument #	Init. Cal.	Cont. Cal.										
DATE/TIME:	8/31/87	8/31 1402										
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene												
2,6-Dinitrotoluene												
Diethylphthalate												
4-Chlorophenyl-phenylether												
Fluorene												
4-Nitroaniline												
4,6-Dinitro-2-Methylphenol												
N-Nitrosodiphenylamine												
4-Bromophenyl-phenylether												
Hexachlorobenzene												
Pentachlorophenol												
Phenanthrene												
Anthracene												
Di-n-Butylphthalate												
Fluoranthene												
Pyrene												
Butylbenzylphthalate												
Benzo(a)Anthracene												
bis(2-Ethylhexyl)Phthalate												
Chrysene												
Di-n-Octyl Phthalate												
Benzo(b)Fluoranthene												
Benzo(k)Fluoranthene												
Benzo(a)Pyrene												
Indeno(1,2,3-cd)Pyrene												
Dibenz(a,h)Anthracene												
Benzo(g,h,i) Perylene												

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: ZGK 10/8/87



September 2, 1987

Joan Fisk
U.S. EPA
Hazardous Waste Investigation
401 M Street, SW
Washington, DC 20460

SF 4339

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Dear Ms. Fisk:

Enclosed are data summary sheets and documentation for samples and QA/QC comprising case 7914/3048E of Contract 68-01-7140. These samples were received 8/20/87 and logged in under the following Enseco-Cal Lab numbers:

<u>Enseco-Cal Lab Number</u>	<u>Sample I.D.</u>
30952-1	ET 121
30952-2	ET 122
30952-3	ET 123
30952-4	ET 124
30952-5	ET 125
30952-6	ET 131

The samples were analyzed as low concentration water samples for low detection limits on a fifteen day turnaround. No problems were encountered.

This report was checked for contractual compliance, assembled, paginated then printed and assembled by a Kodak copier/assembler. Each copy has been checked for completeness. This check may miss some individual pages. Please request by page number if any page is missing.

If you have any questions, please give us a call.

Sincerely,

Michael W. Orbanosky
Director of GC/MS Services

Michael S. Filigenz
GC/MS Supervisor

Ben N. Buechler
Director of Chromatography

Karin S. Yee
Data Specialist

METHOD BLANK SUMMARY

*EV
per*

CASE NO. 7914/3048E REGION: 5 CONTRACTOR: ENSECO - CALIFORNIA ANALYTICAL LABS, INC CONTRACT NO. 68-01-7140

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL,TIC OR UNKNOWN)	CONC.	UNITS	CRDL
VBK9870824	8/24/87	VOA	WATER	LOW	F9	-	NO VOA COMPOUND FOUND	-	-	-
30952MB	8/30/87	PEST	WATER	LOW	GC6	-	NO PESTICIDES FOUND	-	-	-
30952MB	9/1/87	ABN	WATER	LOW	F10	117-81-7 108-88-3 19456-20-3 4337-65-9	BIS(2-ETHYLHEXYL)PHTHALATE BENZENE, METHYL- 1,3-BENZODIOXOL-2-ONE, HEXAHYD HEXANEDIOIC ACID, MONO(2-ETHYL)	15 12 4 3	UG/L UG/L UG/L UG/L	1
30952MB	9/1/87	ABN	WATER	LOW	F12	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	15	UG/L	1

COMMENTS:

FORM IV

7/85

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WATER SURROGATE PERCENT RECOVERY SUMMARY

CASE NO.: 7914/3048E CONTRACT LABORATORY: CALIFORNIA ANALYTICAL LABS

CONTRACTR NO. :68-01-7140

DATA PREP/RELEASE BY: EV, Mew

SMO TRAFFIC NO.	VOLATILE				SEMI-VOLATILE				PESTICIDE	
	TOLUENE D8 (88-110)	BFB (86-115)	1,2 DICHLORO ETHANE D4 (76-114)	NITRO- BENZENE D5 (36-114)	2-FLUORO BIPHENYL (43-116)	TERPHENYL D14 (33-141)	PHENOL-D5 (10-94)	2-FLUORO- PHENOL (21-100)	2,4,6 TRIBROMO- PHENOL (10-123)	DIBUTYL- CHLORENDATE (24-154)**
ET 121	99	99	97	51	75	81	32	45	75	48
ET 122	99	99	97	59	68	77	33	46	65	18*
ET 123	96	100	97	57	82	84	27	34	50	40
ET 124	97	104	101	52	77	86	30	40	60	74
ET 125	98	105	107	40	70	74	32	50	55	47
ET 131	103	108	108	62	69	68	29	48	48	41
ET 121 MS	101	107	111	59	73	82	34	40	60	NR
ET 121 MSD	101	105	107	53	68	72	35	43	70	NR
VBK9870824	97	99	94	NR	NR	NR	NR	NR	NR	NR
ET 121 MS	NR	NR	NR	59	74	84	33	40	62	37
ET 121 MSD	NR	NR	NR	53	69	72	34	43	69	39
30952MB(10)	NR	NR	NR	45	74	84	32	50	55	36
30952MB(12)	NR	NR	NR	58	69	92	34	48	84	NR

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

VOLATILES: OUT OF 27 : OUTSIDE OF QC LIMITS
 SEMI-VOLATILES: OUT OF 72 : OUTSIDE OF QC LIMITS
 PESTICIDES: OUT OF 9 : OUTSIDE OF QC LIMITS

COMMENTS:

RECEIVED 100% QC
 10/25/95

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7/85

Comments:

FRACTION	COMPOUND	CONC. SPIKE ADDED(ug/L)	SAMPLE	DUPLICATE	RESULT	CONC.	X REC	MSO	% RPD		% LIMITS*		RPD RECOVERY
									% CONC.	% MSO	% RPD	% LIMITS*	
VOA	1,1-Dichloroethene	10	10	10	8	9.1	9.1	13	14	61-145	61-145	61-145	ET 121
SMD	Toluene	10	10	10	9	9.3	9.3	13	16	71-120	75-130	76-125	ET 121
SMD	Chlorobenzene	10	10	10	9	9.4	9.4	13	13	75-130	80-140	80-140	ET 121
SMD	Acetophenone	20	20	20	15.2	12.3	7.6	28	39-98	46-118	46-118	ET 121	
SMD	1,2,4-Trichlorobenzene	20	20	20	15.2	12.3	7.6	28	39-98	46-118	46-118	ET 121	
SMD	Pyrene	20	20	20	10.8	10.8	5.6	38	39-98	46-118	46-118	ET 121	
SMD	N-Methylbenzene	20	20	20	10.8	10.8	5.6	38	39-98	46-118	46-118	ET 121	
SMD	2,4-Dinitrotoluene	20	20	20	15.9	15.9	8.6	20	39-98	46-118	46-118	ET 121	
SMD	Acenaphthene	20	20	20	16.6	16.6	8.6	20	39-98	46-118	46-118	ET 121	
SMD	1,4-Dichlorobenzene	20	20	20	13.7	13.7	7.5	31	39-98	46-118	46-118	ET 121	
SMD	N-Methylacetamide	20	20	20	13.7	13.7	7.5	31	39-98	46-118	46-118	ET 121	
SMD	Phenol	40	40	40	11.7	11.7	5.5	19	9-103	12-89	12-89	AC10	
SMD	2-Chlorophenol	40	40	40	13.1	12.3	6.7	28	22-123	27-125	27-125	ET 121	
SMD	4-Chlorophenol	40	40	40	13.1	12.3	6.7	28	22-123	27-125	27-125	ET 121	
SMD	Heptachlor	0.02	0.02	0.02	100	100	0.02	0.02	0.02	0.02	0.02	PEST	
SMD	Endrin	0.02	0.02	0.02	100	100	0.02	0.02	0.02	0.02	0.02	AC10	
SMD	Aldrin	0.02	0.02	0.02	100	100	0.02	0.02	0.02	0.02	0.02	B/Ns	
SMD	Volas	out of 5	out of 5	out of 10	100	100	0.02	0.02	0.02	0.02	0.02	RPD	

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

CONTRACT NO. 68-01-7140

CASE NO.: 7916/3048E

RECOVERIES: VOA out of 5 ; outside QC limits
B/Ns out of 6 ; outside QC limits
8/Ns out of 12 ; outside QC limits
8/Ns out of 10 ; outside QC limits
AC10 out of 12 ; outside QC limits
AC10 out of 10 ; outside QC limits
PEST out of 12 ; outside QC limits
PEST out of 6 ; outside QC limits
Comments:

Comments:

RPD: VOA out of 5 ; outside QC limits
B/Ns out of 6 ; outside QC limits
8/Ns out of 12 ; outside QC limits
8/Ns out of 10 ; outside QC limits
AC10 out of 12 ; outside QC limits
AC10 out of 10 ; outside QC limits
PEST out of 12 ; outside QC limits
PEST out of 6 ; outside QC limits
Comments:

Comments:

RPD: VOA out of 5 ; outside QC limits
B/Ns out of 6 ; outside QC limits
8/Ns out of 12 ; outside QC limits
8/Ns out of 10 ; outside QC limits
AC10 out of 12 ; outside QC limits
AC10 out of 10 ; outside QC limits
PEST out of 12 ; outside QC limits
PEST out of 6 ; outside QC limits
Comments:

LABORATORY INSTRUMENT DETECTION LIMITS
Organics Analysis Data Sheet
(Page 1)

Sample Number

F9

Laboratory Name: California Analytical Laboratories, Inc.

Case No.: *REC*

Lab Sample ID No:

QC Report No:

Sample Matrix:

Contract No: 68-01-6958, 68-01-6965, 68-01-7140, 68-01-7147

Data Release Authorized By:

Date Sample Received: *ST 10/30/83*

Volatile Compounds

Concentration: _____

Date Extracted/Prepared: _____

Date Analyzed: _____

Conc/Dil Factor: _____

Percent Moisture: _____

Percent Moisture (Decanted): _____

CAS
Number

		NO
74-87-3	Chloromethane	48
74-83-9	Bromomethane	22
75-01-4	Vinyl Chloride	23
75-00-3	Chloroethane	18
75-09-2	Methylene Chloride	6.0
67-64-1	Acetone	8.5
75-15-0	Carbon Disulfide	7.4
75-35-4	1,1-Dichloroethene	7.8
75-34-3	1,1-Dichloroethane	8.7
156-60-5	Trans-1,2-Dichloroethene	7.8
67-66-3	Chloroform	7.7
107-06-2	1,2-Dichloroethane	10
75-83-3	2-Butanone	4.5
71-65-6	1,1,1-Trichloroethane	6.0
66-23-5	Carbon Tetrachloride	4.1
108-05-4	Vinyl Acetate	4.1
75-27-4	Bromodichloromethane	2.3

CAS
Number

75-87-6	1,2-Dichloropropene	8.1
10061-02-6	Trans-1,3-Dichloropropene	8.3
75-01-6	Trichloroethene	4.4
124-48-1	Dibromochloromethane	2.1
75-00-8	1,1,2-Trichloroethane	4.4
71-63-2	Benzene	8.5
10061-01-6	cis-1,3-Dichloropropene	8.2
110-78-8	2-Chloroethylvinylether	3.1
75-28-2	Bromoform	2.4
108-10-1	4-Ethyl-2-Pentanone	8.7
981-78-6	2-Hexanone	10
127-18-4	Tetrachloroethene	4.9
75-34-5	1,1,2,2-Tetrachloroethane	6.2
108-88-3	Toluene	4.9
193-80-7	Chlorobenzene	3.7
190-41-6	Ethylbenzene	2.1
100-42-6	Syrene	3.3
	Total Xylenes	2.0

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

V Value If the result is a value greater than or equal to the detection limit, report the value.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ml in the final extract should be confirmed by GC/MS.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
S See cover letter.
NR Not Required.
S Spiked Compound.

Sample Number

F10, F1D

**Organics Analysis Data Sheet
 (Page 2)**

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Semivolatile Compounds

Concentration: _____
 Date Extracted/Prepared: _____
 Date Analyzed: _____
 Conc/Dil Factor: _____

GPC Cleanup: _____
 Separatory Funnel Extraction: _____
 Continuous Liquid - Liquid Extraction: _____

CAS Number	NG
108-95-2	Phenol
111-44-4	bis(2-Chloroethyl)Ether
95-57-8	2-Chlorophenol
841-73-1	1,3-Dichlorobenzene
106-46-7	1,4-Dichlorobenzene
100-51-6	Benzyl Alcohol
95-50-1	1,2-Dichlorobenzene
95-48-7	2-Methylphenol
39638-32-9	bis(2-chloroisopropyl)Ether
106-44-5	4-Methylphenol
621-64-7	N-Nitroso-Di-n-Propylamine
67-72-1	Hexachlorobutane
98-95-3	Nitrobenzene
78-59-1	Isophorone
88-75-5	2-Nitrophenol
105-67-9	2,4-Dimethylphenol
65-85-0	Benzoic Acid
111-91-1	bis(2-Chloroethyl)Methane
120-83-2	2,4-Dichlorophenol
120-82-1	1,2,4-Trichlorobenzene
91-20-3	Naphthalene
106-47-8	4-Chloraniline
87-68-3	Hexachlorobutadiene
69-50-7	4-Chloro-3-Methylphenol
91-57-6	2-Methylnaphthalene
77-47-4	Hexachlorocyclopentadiene
88-06-2	2,4,6-Trichlorophenol
95-85-4	2,4,5-Trichlorophenol
91-58-7	2-Chloronaphthalene
88-74-4	2-Nitroaniline
131-11-3	Dimethyl Phthalate
208-96-8	Acenaphthylene
99-09-2	3-Nitroaniline

CAS Number	NG
83-32-9	Acenaphthene
81-28-5	2,4-Dinitrophenol
160-02-7	4-Nitrophenol
132-64-9	Dibenzofuran
121-14-2	2,4-Dinitrotoluene
806-20-2	2,6-Dinitrotoluene
84-66-2	Diethylphthalate
7005-72-3	4-Chlorophenyl-phenylether
86-73-7	Fluorene
100-01-6	4-Nitroaniline
834-62-1	4,6-Dinitro-2-Methylphenol
86-30-6	N-Nitroso-diphenylamine(1)
101-65-3	4-Bromophenyl-phenylether
118-74-1	Hexachlorobenzene
87-86-5	Pentachlorophenol
86-01-8	Phenantrrene
120-12-7	Anthracene
84-74-2	Di-n-Butylphthalate
206-44-0	Fluoranthene
129-00-0	Pyrene
85-68-7	Butylbenzylphthalate
91-94-1	1,3-Dichlorobenzidine
86-55-3	Benz(a)Anthracene
117-81-7	bis(2-Ethoxy)Phthalate
218-01-0	Chrysenes
117-84-0	Di-n-Octyl Phthalate
205-09-2	Benz(b)Fluoranthene
207-08-8	Benz(a)Fluoranthene
80-32-8	Benz(a)Pyrene
183-39-5	Indeno(1,2,3-ef)Pyrene
83-70-3	Dibenz(a,h)Anthracene
181-24-2	Benz(g,h)Perylene

(1) - Cannot be separated from diphenylamine

OCe

LABORATORY INSTRUMENT DETECTION LIMITS

Organics Analysis Data Sheet
 (Page 3)

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16
1987

Pesticide/PCBs

Concentration: _____

GPC Cleanup: _____

Date Extracted/Prepared: _____

Separatory Funnel Extraction: _____

Date Analyzed: _____

Continuous Liquid - Liquid Extraction: _____

Conc/Dil Factor: _____

CAS
Number

DL (On Column)

563-820-6	Alpha-BHC	5
563-83-7	Beta-BHC	5
563-84-8	Delta-BHC	5
563-85-9	Gammme-BHC (Lindane)	5
76-2020-8	Keponechlor	5
869-00-10	Aldrin	5
801020-57-3	Heptachlor Epoxide	5
869-83-8	Endosulfan I	10
80-57-1	Heptachlor	10
710-66-8	20,20'-DDE	10
710-100-8	Endrin	10
831013-65-9	Endosulfan II	10
72-520-8	20,20'-DDD	20
1031-07-8	Endosulfan Butate	20
80-29-3	20,20'-DDT	20
72-203-6	Methoxychlor	100
5320220-70-8	Endrin Ketone	20
57-720-8	Chlordane	100
8001-35-2	Tetachrone	1000
136720-11-2	Aroclor-1016	100
11104-28-2	Aroclor-1221	100
11141-16-8	Aroclor-1222	100
83469-21-8	Aroclor-1242	100
12672-29-6	Aroclor-1248	100
11087-89-1	Aroclor-1254	100
11095-82-5	Aroclor-1260	100

V_i = Volume of extract injected (uL)

V_s = Volume of water extracted (mL)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (uL)

V_s =

or W_s = NR

V_t =

V_i =

Case: 7914/3048 EContractor: CAL

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TENTATIVELY IDENTIFIED COMPOUNDS
WATCH ASSESSMENT

NOTE: Reviewer should note directly on Organic Analysis Data Sheet (OADS) those matches that in his opinion (based on contract criteria) are unreasonable.

CRITERIA

- (1) Relative intensities of major ions (>10%) reference spectrum should be present in the sample spectrum.
- (2) Relative intensities of major ions in sample spectrum should agree to within \pm 20% of reference spectrum intensities.
- (3) Molecular ions present in reference spectrum should be present in sample spectrum.
- (4) Ions present in sample spectrum, but not in reference spectrum should be reviewed for possible background contamination or presence of coeluting interferences.
- (5) Ions present in reference spectrum, but not in the sample spectrum should be reviewed for possible subtraction from the sample spectrum because of background contamination or coeluting interferences.
- (6) If, in the reviewer's opinion, no valid identification can be made the compound should be labelled as "unknown" and the initials and date of the reviewer placed on the OADS.

Reviewer's Initials/Date: Z6K 10/3/87

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Case 7918/3048E

<u>Enseco-Cal I.D.</u>	<u>EPA I.D.</u>	<u>ug/L (ppb) Found</u>
		Aniline
30952-1	ET 121	10 U
30952-2	ET 122	10 U
30952-3	ET 123	10 U
30952-4	ET 124	10 U
30952-5	ET 125	10 U
30952-6	ET 131	10 U
30952-MB	Method Blank	10 U
30952-1MS	ET 121MS	10 U
30952-1MSD	ET 121MSD	10 U

<u>Enseco-Cal I.D.</u>	<u>EPA I.D.</u>	<u>ug/L (ppb) Found</u>	
		Acrolein	Acrylonitrile
30952-1	ET 121	100 U	50 U
30952-2	ET 122	100 U	50 U
30952-3	ET 123	100 U	50 U
30952-4	ET 124	100 U	50 U
30952-5	ET 125	100 U	50 U
30952-6	ET 131	100 U	50 U
30952-1MS	ET 121MS	100 U	50 U
30952-1MSD	ET 121MSD	100 U	50 U
VBK9870824	VOA Blank	100 U	50 U

Sample Number

ET 121

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: ENSECO CAL LAB
 Lab Sample ID No: 50952-1
 Sample Matrix: WATER
 Data Release Authorized By: *[Signature]*

Case No: 7914/3048E
 QC Report No: 3048E
 Contract No: 68-01-7140
 Date Sample Received: 8/20/87

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Volatile Compounds

Concentration: Low
 Date Extracted/Prepared: 8/24/87
 Date Analyzed: 8/24/87
 Conc/Dil Factor: 1 pH: NR
 Percent Moisture: NR
 Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	5 U
74-83-9	Bromomethane	5 U
75-01-4	Vinyl Chloride	5 U
75-00-3	Chloroethane	1 U
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
103-50-5	Trans-1,2-Dichloroethene	1 U
67-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
78-93-3	2-Butanone	10 U
71-55-8	1,1,1-Trichloroethane	1 U
86-23-5	Carbon Tetrachloride	1 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	1 U

CAS Number		ug/L
78-34-5	1,1,2,2-Tetrachloroethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-02-6	Trans-1,3-Dichloropropene	1 U
78-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	1 U
78-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-01-5	cis-1,3-Dichloropropene	1 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	1 U
801-79-5	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	1 U
108-88-3	Toluene	1 U
108-90-7	Chlorobenzene	1 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
	Total Xylenes	1 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- V** Value If the result is a value greater than or equal to the detection limit, report the value.
- U** Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.
- J** Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

- C** This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq 10\text{ng}/\text{ml}$ in the final extract should be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other** Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.
- NA** Not Analyzed.
- S** See cover letter.
- NR** Not Required.
- S** Spiked Compound.

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Organics Analysis Data Sheet
 (Page 2)

Semivolatile Compounds

Concentration: Low
 Date Extracted/Prepared: 8/24/87
 Date Analyzed: 9/1/87
 Conc/Dil Factor: 1

GPC Cleanup: NO
 Separatory Funnel Extraction: YES
 Continuous Liquid - Liquid Extraction: NO

CAS Number		ug/L
106-95-2	Phenol	1.0 U
111-44-4	bis(2-Chloroethyl)Ether	1.0 U
65-57-8	2-Chlorophenol	1.0 U
541-73-1	1,2-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	1.0 U
65-50-1	1,2-Dichlorobenzene	1.0 U
65-48-7	2-Methylphenol	1.0 U
50-53-32-0	bis(2-chloroisopropyl)Ether	1.0 U
106-44-6	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachloroethane	1.0 U
56-25-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
56-75-5	2-Nitrophenol	1.0 U
106-67-9	2,4-Dimethylphenol	1.0 U
65-85-0	Benzoic Acid	20 U
111-91-1	bis(2-Chloroethoxy)Methane	1.0 U
120-83-2	2,4-Dichlorophenol	1.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloraniline	1.0 U
67-68-3	Hexachlorobutadiene	1.0 U
66-50-7	4-Chloro-3-Methylphenol	1.0 U
51-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	1.0 U
66-05-2	2,4,5-Trichlorophenol	1.0 U
65-95-4	2,4,5-Trichlorophenol	1.0 U
91-58-7	2-Chloronaphthalene	1.0 U
66-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
66-00-2	3-Nitroaniline	5.0 U

CAS Number		ug/L
83-92-0	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	15 U
100-02-7	4-Nitrophenol	15 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	1.0 U
805-20-2	2,6-Dinitrotoluene	1.0 U
84-85-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
65-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
894-82-1	4,6-Dinitro-2-Methylphenol	15 U
65-30-6	N-Nitrosodiphenylamine(1)	1.5 U
101-55-3	4-Bromophenyl-phenylether	1.5 U
118-74-1	Hexachlorobenzene	1.5 U
57-95-6	Pentachlorophenol	2.0 U
66-01-8	Phenanthrene	1.0 U
130-12-7	Anthracene	2.5 U
84-74-2	Di-n-Butylphthalate	2.0 U
206-44-0	Fluorenone	1.5 U
129-00-0	Pyrene	1.5 U
65-85-7	Butylbenzylphthalate	2.5 U
91-04-1	3,5'-Dichlorobenzidine	20 U
65-55-3	Benz(a)Anthracene	1.5 U
117-81-7	bis(2-Ethylhexyl)Phthalate	24 B
218-01-8	Chrysene	1.5 U
117-64-0	Di-n-Octyl Phthalate	1.5 U
206-99-2	Benz(b)Fluoranthene	1.5 U
207-08-9	Benz(a)Fluoranthene	1.5 U
80-32-8	Benz(a)Pyrene	2.0 U
193-99-5	Indeno[1,2,3- <i>cd</i>]Pyrene	3.5 U
83-70-3	Dibenz(a,h)Anthracene	2.5 U
191-34-2	Benz(a,h)Perylene	4.0 U

(1) - Cannot be separated from diphenylamine

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CLF

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW

GPC Cleanup: NO

Date Extracted/Prepared: 8/21/87

Separatory Funnel Extraction: YES

Date Analyzed: 8/30/87

Continuous Liquid - Liquid Extraction: NO

Conc/Dil Factor: 1

CAS Number		ug/l.
319-84-6	Alpha-BHC	0.010 u
319-85-7	Beta-BHC	0.0050 u
319-86-8	Delta-BHC	0.0050 u
58-99-9	Gamma-BHC (Lindane)	0.0050 u
76-44-8	Heptachlor	0.030 u
302-00-2	Aldrin	0.2050 u
1024-57-3	Heptachlor Epoxide	0.0050 u
860-86-8	Endosulfan I	0.010 u
80-57-1	Dieldrin	0.010 u
72-55-9	4,4'-DDE	0.0050 u
72-20-8	Endrin	0.010 u
33213-65-0	Endosulfan II	0.010 u
72-54-8	4,4'-DDD	0.020 u
1031-07-8	Endosulfan Sulfate	0.10 u
80-29-3	4,4'-DDT	0.020 u
72-43-6	Methoxychlor	0.020 u
63494-70-8	Endrin Ketone	0.030 u
57-74-8	Chlordane	0.020 u
8001-35-2	Taxaphene	0.25 u
12674-11-2	Aroclor-1016	0.10 u
11104-28-2	Aroclor-1221	0.10 u
11141-16-8	Aroclor-1222	0.10 u
83460-21-8	Aroclor-1242	0.10 u
12672-29-6	Aroclor-1248	0.10 u
11087-66-1	Aroclor-1254	0.10 u
11096-82-5	Aroclor-1260	0.10 u

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or $W_s = \text{NR}$

$V_t = 5000$

$V_i = 5$

QAT

ORGANICS ANALYSIS DATA SHEET
Page 4
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAL

Case No. 7914/304BE

Sample No. ET 121^J

QC Report No. 3048E

Lab Sample No. 3095201ABRI

CINNAMIC
UTI

Probability that Identification is Correct:

A= HIGH B= MODERATE C= UNKNOWN D= SOLVENT IMPURITY, see VOA

Estimated
CONC
J VALUE

CAS#	COMPOUND NAME	FRACTION	SCAN	PURITY	Estimated CONC J VALUE
1. 629-74-3	1-HEXADECYNE	A/BN	1328	842	5.8 ug/L
2. 4337-65-9	HEXANEDIOIC ACID, MONO(2-ETHYL	A/BN	1503	888	6.8 ug/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. 1-HEXADECYNE	1.B	1.
2. HEXANEDIOIC ACID, MONO(2-ETHYL	2.A	2. or isomer

(W)

1087

no volatile compounds

FORM 1, PART B

Sample Number
ET 122

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ENSECO CAL LAB

Case No: 7914/3048E

Lab Sample ID No: 30952-2

QC Report No: 3048E

Sample Matrix: WATER

Contract No: 58-01-7140

Data Release Authorized By: *J. M. W.*

Date Sample Received: 8/20/87

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Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 8/24/87

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS
Number

CAS Number		ug/L
74-87-3	Chloromethane	8 U
74-83-9	Bromomethane	8 U
75-01-4	Vinyl Chloride	8 U
75-00-3	Chloroethane	1 U
75-09-2	Methylene Chloride	8 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
186-60-5	Trans-1,2-Dichloroethene	1 U
67-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
78-83-3	2-Butanone	10 U
71-55-8	1,1,1-Trichloroethane	1 U
88-23-5	Carbon Tetrachloride	1 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	1 U

CAS
Number

CAS Number		ug/L
79-34-6	1,1,2,2-Tetrachloroethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-02-6	Trans-1,3-Dichloropropene	1 U
79-01-6	Trichloroethane	1 U
124-48-1	Dibromochloromethane	1 U
79-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-01-6	cis-1,3-Dichloropropene	1 U
110-75-8	2-Chloroethylvinylether	10 U
78-25-2	Bromoform	1 U
801-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	1 U
108-98-3	Toluene	1 U
108-90-7	Chlorobenzene	1 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
	Total Xylenes	1 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

V Value If the result is a value greater than or equal to the detection limit, report the value.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq 10\text{ng}/\text{L}$ in the final extract should be confirmed by GC/MS.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J). If limit of detection is 10ug/l and a concentration of 8ug/l is calculated, report as 8J

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
S See cover letter.
NR Not Required.
S Spiked Compound.

Organics Analysis Data Sheet
 (Page 2)

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10/11/85

Semivolatile Compounds

Concentration: Low

GPC Cleanup: NO

Date Extracted/Prepared: 8/24/87

Separatory Funnel Extraction: YES

Date Analyzed: 9/1/87

Continuous Liquid - Liquid Extraction: NO

Conc/Dil Factor: 1

CAS Number		ug/L
108-95-2	Phenol	1.0 U
111-44-4	Mes(2-Chloroethyl)Ether	1.0 U
95-57-8	2-Chlorophenol	1.0 U
641-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	1.0 U
39538-32-9	Mes(2-chloroacopropyl)Ether	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachloroethane	1.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
98-75-6	2-Nitrophenol	1.0 U
105-67-0	2,4-Dimethylphenol	1.0 U
65-85-0	Benzoic Acid	20 U
111-81-1	Mes(2-Chloroethoxy)Methane	1.0 U
120-83-2	2,4-Dichlorophenol	1.0 U
130-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloronaniline	1.0 U
87-68-3	Hexachlorobutadiene	1.0 U
98-80-7	4-Chloro-3-Methylphenol	1.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	1.0 U
98-05-2	2,4,5-Trichlorophenol	1.0 U
95-95-4	2,4,5-Trichlorophenol	1.0 U
91-58-7	3-Chloronaphthalene	1.0 U
98-74-4	2-Nitroaniline	8.0 U
131-11-3	Dimethyl Phthalate	1.0 U
208-95-8	Acenaphthylene	1.0 U
98-09-2	3-Nitroaniline	8.0 U

CAS Number		ug/L
83-32-9	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	15 U
100-02-7	4-Nitrophenol	15 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	1.0 U
906-20-2	2,6-Dinitrotoluene	1.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
85-73-7	Fluorane	1.0 U
100-01-6	4-Nitroaniline	8.0 U
834-52-1	4,6-Dinitro-2-Methylphenol	15 U
88-30-6	N-Nitrosodiphenylamine(1)	1.5 U
101-55-3	4-Bromophenyl-phenylether	1.5 U
118-74-1	Hexachlorobenzene	1.5 U
87-66-5	Pentachlorophenol	2.0 U
95-01-8	Phenanthrene	1.0 U
120-12-7	Anthracene	2.5 U
94-74-2	Di-n-Butylphthalate	2.0 U
206-44-0	Fluoranthene	1.5 U
129-00-0	Pyrene	1.5 U
85-68-7	Butylbenzylphthalate	3.5 U
91-94-1	2,3'-Dichlorobenzidine	20 U
98-55-3	Benz(a)Anthracene	1.5 U
117-81-7	Mes(2-Ethylhexyl)Phthalate	8.0 U
218-01-9	Chrysene	1.5 U
117-84-0	Di-n-Octyl Phthalate	1.5 U
205-99-2	Benz(b)Fluoranthene	1.5 U
207-06-8	Benz(k)Fluoranthene	1.5 U
90-32-8	Benz(s)Pyrene	2.0 U
193-39-5	Indeno(1,2,3- <i>cd</i>)Pyrene	3.5 U
93-70-3	Dibenz(a,h)Anthracene	2.5 U
191-24-2	Benz(a,h,i)Perylene	4.0 U

(1) - Cannot be separated from diphenylamine

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Organics Analysis Data Sheet
(Page 3)

Concentration: **LOW**
Date Extracted/Prepared: **8/21/87**
Date Analyzed: **8/30/87**
Conc/Dil Factor: **1**

Pesticide/PCBs

GPC Cleanup: **NO**

Separatory Funnel Extraction: **YES**

Continuous Liquid - Liquid Extraction: **NO**

CAS Number		ug/l
318-84-6	Alpha-BHC	0.010 U
318-85-7	Beta-BHC	0.0050 U
319-86-8	Delta-BHC	0.0050 U
58-89-9	Gamma-BHC (Lindane)	0.0050 U
78-44-8	Heptachlor	0.030 U
309-00-2	Aldrin	0.0050 U
1024-67-3	Heptachlor Epoxide	0.0050 U
939-98-8	Endosulfan I	0.010 U
60-57-1	Dieldrin	0.010 U
72-55-9	4,4'-DDE	0.0050 U
72-20-8	Endrin	0.010 U
23213-55-9	Endosulfan II	0.010 U
72-54-8	4,4'-DDD	0.020 U
1031-07-8	Endosulfan Sulfate	0.10 U
80-29-3	4,4'-DDT	0.020 U
72-43-8	Methoxychlor	0.020 U
63494-70-5	Endrin Ketone	0.030 U
67-74-9	Chlordane	0.020 U
8001-35-2	Texaphene	0.25 U
12874-11-2	Aroclor-1016	0.10 U
11104-28-2	Aroclor-1221	0.10 U
11141-16-5	Aroclor-1232	0.10 U
63469-21-9	Aroclor-1242	0.10 U
12672-29-6	Aroclor-1248	0.10 U
11007-69-1	Aroclor-1254	0.10 U
11095-82-5	Aroclor-1260	0.10 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s \approx 1000$ or $W_s \approx NR$

$V_t \approx 5000$

$V_i = 5$

out

ORGANICS ANALYSIS DATA SHEET
Page 4
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAL

Case No. 7914/304BE

Sample No. ET 122

QC Report No. 304BE

Lab Sample No. 3095202ABRI

Probability that Identification is Correct:

A= HIGH B= MODERATE C= UNKNOWN D= SOLVENT IMPURITY. see VDA

Estimated
CONC.
J VALUE

CAS#	COMPOUND NAME	FRACTION NUMBER PURITY
	No A/BN	BCAN

No volatile compounds

FORM 1, PART B

(M)

✓

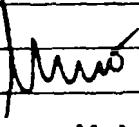
Organics Analysis Data Sheet

(Page 1)

Laboratory Name: ENSECO CAL LAB

Lab Sample ID No: 20952-3

Sample Matrix: WATER

Data Release Authorized By: 

Case No: 7914/3048E

QC Report No: 3048E

Contract No: 88-01-7140

Date Sample Received: 8/20/87

REC'D BY 8/20/87

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 8/24/87

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

**CAS
Number**

ug/L

74-87-3	Chloromethane	5 U
74-85-9	Bromomethane	5 U
75-01-4	Vinyl Chloride	5 U
75-00-3	Chloroethane	1 U
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U
67-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
78-93-3	2-Butanone	10 U
71-55-6	1,1,1-Trichloroethane	1 U
56-23-5	Carbon Tetrachloride	1 U
108-06-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	1 U

**CAS
Number**

ug/L

79-34-5	1,1,2,2-Tetrachloroethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-02-6	Trans-1,3-Dichloropropene	1 U
79-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	1 U
79-00-5	1,1,2-Trichloroethene	1 U
71-43-2	Benzene	1 U
10061-01-5	cis-1,3-Dichloropropene	1 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromotorm	1 U
801-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	1 U
108-88-3	Toluene	1 U
108-90-7	Chlorobutane	1 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
	Total Xylenes	1 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

V Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicate an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq 10\text{ng}/\text{ml}$ in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

RECEIVED 8/21/87

LO58

Organics Analysis Data Sheet
 (Page 2)

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 8/31/87

Conc/Dil Factor: 1

GPC Cleanup: NO

Separatory Funnel Extraction: YES

Continuous Liquid - Liquid Extraction: NO

CAS Number		ug/L
108-85-2	Phenol	1.0 U
111-44-4	bis(2-Chloroethyl)Ether	1.0 U
85-57-8	2-Chlorophenol	1.0 U
641-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	1.0 U
85-50-1	1,2-Dichlorobenzene	1.0 U
85-48-7	2-Methylphenol	1.0 U
39638-32-9	bis(2-chloroethylpropyl)Ether	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachlorobutane	1.0 U
85-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
85-75-5	2-Nitrophenol	1.0 U
106-57-9	2,4-Dimethylphenol	1.0 U
65-85-0	Benzoic Acid	20 U
111-91-1	bis(2-Chloroethoxy)Methane	1.0 U
120-63-2	2,4-Dichlorophenol	1.0 U
120-62-1	1,2,4-Trichlorobenzene	1.0 U
81-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	1.0 U
87-68-3	Hexachlorobutadiene	1.0 U
89-50-7	4-Chloro-3-Methylphenol	1.0 U
81-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	1.0 U
85-06-2	2,4,8-Trichlorophenol	1.0 U
85-25-4	2,4,5-Trichlorophenol	1.0 U
81-58-7	2-Chloronaphthalene	1.0 U
85-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
208-95-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	5.0 U

CAS Number		ug/L
83-32-9	Acenaphthene	1.0 U
61-28-5	2,4-Dinitrophenol	15 U
100-02-7	4-Nitrophenol	15 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	1.0 U
606-20-2	2,6-Dinitrotoluene	1.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
85-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
834-52-1	4,5-Dinitro-2-Methylphenol	15 U
85-30-6	N-Nitroso-diphenylamine(1)	1.5 U
101-55-3	4-Bromophenyl-phenylether	1.5 U
118-74-1	Hexachlorobenzene	1.5 U
87-06-6	Pentachlorophenol	2.0 U
85-01-8	Phenanthrene	1.0 U
120-12-7	Anthracene	2.5 U
84-74-2	Di-n-Butylphthalate	2.0 U
306-44-0	Fluoranthene	1.5 U
129-00-0	Pyrene	1.5 U
85-68-7	Butylbenzylphthalate	2.5 U
91-64-1	2,3'-Dichlorobenzidine	20 U
85-55-3	Benz(a)Anthracene	1.5 U
117-81-7	bis(2-Ethyhexyl)Phthalate	6 B
218-01-8	Chrysene	1.5 U
117-84-0	Di-n-Octyl Phthalate	1.5 U
205-99-2	Benz(b)Fluoranthene	1.5 U
207-06-9	Benz(k)Fluoranthene	1.5 U
80-32-8	Benz(a)Pyrene	2.0 U
183-39-5	Indeno(1,2,3- <i>cd</i>)Pyrene	3.5 U
83-70-3	Dibenz(a,h)Anthracene	2.5 U
181-34-2	Benz(g,h,i)Perylene	4.0 U

(1) - Cannot be separated from diphenylamine

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Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW
Date Extracted/Prepared: 8/21/87
Date Analyzed: 8/30/87
Conc/Dil Factor: 1

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid - Liquid Extraction: NO

CAS Number		ug/L
319-84-6	Alpha-BHC	0.010 U
319-85-7	Beta-BHC	0.0050 U
319-83-8	Delta-BHC	0.0050 U
58-89-9	Gamma-BHC (Lindane)	0.0050 U
76-44-8	Heptachlor	0.030 U
309-00-2	Aldrin	0.0050 U
1024-57-3	Heptachlor Epoxide	0.0050 U
650-98-8	Endosulfan I	0.010 U
60-57-1	Dieldrin	0.010 U
72-55-9	4,4'-DDE	0.0050 U
72-20-8	Endrin	0.010 U
33213-65-9	Endosulfan II	0.010 U
72-54-8	4,4'-DDD	0.020 U
1031-07-8	Endosulfan Sulfate	0.10 U
80-29-3	4,4'-DDT	0.020 U
72-43-6	Methoxychlor	0.020 U
83494-70-5	Endrin Ketone	0.030 U
57-74-8	Chlordane	0.020 U
8001-35-2	Toxaphene	0.25 U
12674-11-2	Aroclor-1016	0.10 U
11104-29-2	Aroclor-1221	0.10 U
11141-16-5	Aroclor-1232	0.10 U
83469-21-8	Aroclor-1242	0.10 U
12672-29-8	Aroclor-1248	0.10 U
11067-69-1	Aroclor-1254	0.10 U
11096-82-5	Aroclor-1260	0.10 U

V_i = Volume of extract injected (uL)

V_s = Volume of water extracted (mL)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (uL)

$V_s = 1000$ or $W_s = NR$

$V_t = 5000$

$V_i = 5$

out

ORGANICS ANALYSIS DATA SHEET
Page 4
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAL

Case No. 7914/304BE

Sample No. ET123

QC Report No. 304BE

Lab Sample No. 3095203AB

Probability that Identification is Correct:

A= HIGH B= MODERATE C= UNKNOWN D= SOLVENT IMPURITY, see VOA

CAS#	COMPOUND NAME	SCAN	FRACTION NUMBER	PURITY	Estimated CONC.	J VALUE
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NO A/B/C

No volatile compounds

FORM 1, PART B

Sample Number

ET 124

Organics Analysis Data Sheet (Page 1)

Laboratory Name: ENSECO CAL LAB

Case No: 7014/3048E

Lab Sample ID No: 30952-4

QC Report No: 3048E

Sample Matrix: WATER

Contract No: 88-01-7140

Data Release Authorized By: *[Signature]*

Date Sample Received: 8/20/87

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Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 8/24/87

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	5 U
74-83-9	Bromomethane	5 U
75-01-4	Vinyl Chloride	5 U
75-00-3	Chloroethene	1 U
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	1 U
75-33-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
155-60-6	Trans-1,2-Dichloroethene	1 U
67-55-3	Chloroform	1 U
107-08-2	1,2-Dichloroethane	1 U
78-03-3	2-Butanone	10 U
71-55-6	1,1,1-Trichloroethane	1 U
86-23-6	Carbon Tetrachloride	1 U
108-06-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	1 U

CAS Number		ug/L
78-34-6	1,1,2,2-Tetrachloroethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-02-8	Trans-1,3-Dichloropropene	1 U
78-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	1 U
78-00-8	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-01-5	cis-1,3-Dichloropropene	1 U
110-75-8	2-Chloroethylvinylether	10 U
76-25-2	Bromoform	1 U
801-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	1
108-88-3	Toluene	1 U
108-80-7	Chlorobenzene	1 U
100-41-4	Ethylbenzene	1 U
100-42-6	Styrene	1 U
	Total Xylenes	1 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

V Value If the result is a value greater than or equal to the detection limit, report the value.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq 10\text{ng}/\text{L}$ in the final extract should be confirmed by GC/MS.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J). If limit of detection is 10ug/L and a concentration of 3ug/L is calculated, report as 3J.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Organics Analysis Data Sheet
 (Page 2)

Semivolatile Compounds

Concentration: Low
 Date Extracted/Prepared: 8/24/87
 Date Analyzed: 8/31/87
 Conc/Dil Factor: 1

GPC Cleanup: NO
 Separatory Funnel Extraction: YES
 Continuous Liquid - Liquid Extraction: NO

1987

CAS Number		ug/L
100-95-2	Phenol	1.0 U
111-44-4	bis(2-Chloroethyl)Ether	1.0 U
95-57-8	2-Chlorophenol	1.0 U
641-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	1.0 U
36638-32-0	bis(2-chloroisopropyl)Ether	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachloroethane	1.0 U
98-96-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
98-75-5	2-Nitrophenol	1.0 U
106-57-0	2,4-Dimethylphenol	1.0 U
65-65-0	Benzoic Acid	30 U
111-01-1	bis(3-Chloroethoxy)Methane	1.0 U
120-63-2	2,4-Dichlorophenol	1.0 U
120-62-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloronaphthalene	1.0 U
67-68-3	Hexachlorobutadiene	1.0 U
95-50-7	4-Chloro-3-Methylphenol	1.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	1.0 U
88-06-2	2,4,5-Trichlorophenol	1.0 U
95-95-4	2,4,5-Trichlorophenol	1.0 U
91-58-7	2-Chloronaphthalene	1.0 U
98-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
204-96-8	Acenaphthylene	1.0 U
90-09-2	3-Nitroaniline	5.0 U

CAS Number		ug/L
63-32-8	Acenaphthene	1.0 U
51-39-5	2,4-Dinitrophenol	15 U
100-02-7	4-Nitrophenol	15 U
132-64-0	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	1.0 U
606-20-2	2,6-Dinitrotoluene	1.0 U
84-66-2	Dichlorthiophthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
634-62-1	4,6-Dinitro-2-Methylphenol	15 U
86-30-6	N-Nitroso-diphenylamine(1)	1.5 U
101-65-3	4-Bromophenyl-phenylether	1.5 U
118-74-1	Heptachlorobenzene	1.5 U
67-66-6	Pentachlorophenol	2.0 U
86-01-8	Phenanthrene	1.0 U
120-12-7	Anthracene	2.5 U
84-74-2	Di-n-Ethylphthalate	2.0 U
206-44-0	Fluoranthene	1.5 U
129-00-0	Pyrene	1.5 U
86-68-7	Butylbenzylphthalate	3.5 U
91-04-1	2,3-Dichlorobenzidine	20 U
86-55-3	Benz(a)Anthracene	1.5 U
117-81-7	Me2-Ethoxy)Phthalate	5.0 U
218-01-0	Chrysene	1.5 U
117-84-0	Di-n-Octyl Phthalate	1.5 U
205-99-2	Benz(b)Fluoranthene	1.5 U
207-06-0	Benz(k)Fluoranthene	1.5 U
80-32-8	Benz(a)Pyrene	2.0 U
183-39-6	Indeno[1,2,3- <i>cd</i>]Pyrrole	3.5 U
83-70-3	Dibenz(a,h)Anthracene	2.5 U
191-24-2	Benz(a,h)Perylene	4.0 U

(1) - Cannot be separated from diphenylamine

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW
Date Extracted/Prepared: 8/21/87
Date Analyzed: 8/30/87
Conc/Dil Factor: 1

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid - Liquid Extraction: NO

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CAS Number		ug/L
518-84-6	Alpha-BHC	0.010 u
518-85-7	Beta-BHC	0.0050 u
518-86-8	Delta-BHC	0.0050 u
59-89-9	Germene-BHC (Lindane)	0.0050 u
76-44-8	Heptachlor	0.030 u
309-00-2	Aldrin	0.0050 u
1024-57-3	Heptachlor Epoxide	0.0050 u
959-98-8	Endosulfan I	0.010 u
60-57-1	Dieldrin	0.010 u
72-85-9	4,4'-DDE	0.0050 u
72-20-8	Endrin	0.010 u
33213-65-9	Endosulfan II	0.010 u
72-84-8	4,4'-DDD	0.020 u
1031-07-8	Endosulfan Sulfate	0.10 u
80-29-3	4,4'-DDT	0.020 u
72-43-5	Methoxychlor	0.020 u
83494-70-5	Endrin Ketone	0.000 u
57-74-8	Chlordane	0.020 u
8001-35-2	Texaphene	0.25 u
12874-11-2	Aroclor-1016	0.10 u
11104-28-2	Aroclor-1221	0.10 u
11141-10-5	Aroclor-1232	0.10 u
83469-21-0	Aroclor-1242	0.10 u
12872-29-8	Aroclor-1248	0.10 u
11097-60-1	Aroclor-1254	0.10 u
11096-82-5	Aroclor-1260	0.10 u

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 1000$ or $W_s \approx NR$

$V_t = 5000$

$V_i = 5$

ORGANICS ANALYSIS DATA SHEET
Page 4
TENTATIVELY IDENTIFIED COMPOUNDS

(W)

Det

Lab Name: CAL

Case No. 7914/304BE

Sample No. ET 124

QC Report No. 304BE

Lab Sample No. 3095204AB

Probability that Identification is Correct:

A= HIGH B= MODERATE C= UNKNOWN D= SOLVENT IMPURITY, SEE VDA

CAS#

COMPOUND NAME

FRACTION NUMBER PURITY

SCAN

Estimated CONC.
J VALUE

No A/BN

No volatile compounds

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FORM 1, PART B

Sample Number
ET 125

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ENSECO CAL LAB

Case No: 7914/3048E

Lab Sample ID No: 30952-5

QC Report No: 3048E

Sample Matrix: WATER

Contract No: 88-01-7140

Data Release Authorized By: *Murphy*

Date Sample Received: 8/20/87

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Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 8/24/87

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS Number		ug/L
74-87-3	Chloromethane	8 U
74-83-9	Bromomethane	8 U
75-01-4	Vinyl Chloride	8 U
75-00-3	Chloroethane	1 U
75-09-2	Methylene Chloride	8 U
67-64-1	Acetone	1 U
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
156-60-6	Trans-1,2-Dichloroethene	1 U
67-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
73-63-3	2-Butanone	10 U
71-55-8	1,1,1-Trichloroethane	1 U
86-23-5	Carbon Tetrachloride	1 U
106-06-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	1 U

CAS Number		ug/L
78-34-5	1,1,2,2-Tetrachloroethane	1 U
78-87-5	1,2-Dichloropropene	1 U
10061-02-6	Trans-1,3-Dichloropropene	1 U
79-01-6	Trichloroethane	1 U
124-48-1	Dibromochloromethane	1 U
78-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-01-5	cis-1,3-Dichloropropene	1 U
110-75-8	2-Chloroethylvinylether	10 U
78-25-2	Bromotorm	1 U
881-78-5	2-Hezanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethane	2
108-08-3	Toluene	1 U
103-80-7	Chlorobenzene	1 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
	Total Xylenes	1 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq 10\text{ng}/\text{L}$ in the final extract should be confirmed by GC/MS

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J). If limit of detection is 10ug/L and a concentration of 3ug/L is calculated, report as 3J

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
NR See cover letter.
S Not Required.
Spiked Compound.

**Organics Analysis Data Sheet
 (Page 2)**

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Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 9/1/87

Conc/Dil Factor: 1

GPC Cleanup: NO

Separatory Funnel Extraction: YES

Continuous Liquid - Liquid Extraction: NO

**CAS
 Number**

ug/L

108-95-2	Phenol	1.0 U
111-44-4	bis-(2-Chloroethyl)Ether	1.0 U
95-67-8	2-Chlorophenol	1.0 U
641-73-1	1,3-Dichlorobenzene	1.0 U
108-95-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-68-7	2-Methylphenol	1.0 U
30638-92-0	bis(2-chloroisopropyl)Ether	1.0 U
108-44-5	4-Methylphenol	1.0 U
621-54-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachlorobutane	1.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophonone	1.0 U
98-75-5	2-Nitrophenol	1.0 U
108-67-9	2,4-Dimethylphenol	1.0 U
66-85-0	Benzoic Acid	20 U
111-81-1	Isob-(2-Chloroethyl)Methane	1.0 U
120-83-2	2,4-Dichlorophenol	1.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
108-47-8	4-Chloraniline	1.0 U
87-68-3	Hexachlorobutadiene	1.0 U
98-50-7	4-Chloro-3-Methylphenol	1.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-57-4	Hexachlorocyclopentadiene	1.0 U
98-06-2	2,4,6-Trichlorophenol	1.0 U
95-96-4	2,4,5-Trichlorophenol	1.0 U
91-58-7	2-Chloronaphthalene	1.0 U
98-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
208-95-8	Acenaphthylene	1.0 U
98-09-2	3-Nitroaniline	5.0 U

**CAS
 Number**

ug/L

83-32-9	Acenaphthene	1.0 U
81-20-5	2,4-Dinitrophenol	15 U
100-02-7	4-Nitrophenol	15 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	1.0 U
606-20-2	2,6-Dinitrotoluene	1.0 U
84-65-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,5-Dinitro-2-Methylphenol	15 U
86-30-6	N-Nitroso-diphenylamine ⁽¹⁾	1.5 U
101-55-3	4-Bromophenyl-phenylether	1.5 U
118-74-1	Hexachlorobenzene	1.5 U
87-95-5	Pentachlorophenol	2.0 U
86-01-8	Phenanthrene	1.0 U
120-12-7	Anthracene	2.5 U
84-74-2	Di-n-Butylphthalate	2.0 U
306-44-0	Fluoranthene	1.5 U
129-00-0	Pyrene	1.5 U
85-68-7	Butylbenzylphthalate	3.5 U
91-04-1	3,5-Dichlorobenzidine	20 U
85-55-3	Benz(a)Anthracene	1.5 U
117-81-7	Me2-Ethylhexyl)Phthalate	20 U
218-01-8	Chrysene	1.5 U
117-84-0	Di-n-Octyl Phthalate	1.5 U
205-89-2	Benz(b)Fluoranthene	1.5 U
307-06-0	Benz(d)Fluoranthene	1.5 U
80-32-8	Benz(a)Pyrene	2.0 U
193-39-5	Indeno[1,2,3- <i>cd</i>]Pyrene	3.5 U
63-70-3	Dibenzo[<i>a,h</i>]Anthracene	2.5 U
191-24-2	Benz(o, <i>h</i>)Perylene	4.0 U

(1) - Cannot be separated from diphenylamine

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW

GPC Cleanup: NO

Date Extracted/Prepared: 8/21/87

Separatory Funnel Extraction: YES

Date Analyzed: 8/30/87

Continuous Liquid - Liquid Extraction: NO

Conc/Dil Factor: 1

CAS Number		ug/l
319-84-6	Alpha-BHC	0.010 U
319-85-7	Beta-BHC	0.0050 U
319-86-8	Delta-BHC	0.0050 U
58-09-9	Gamma-BHC (Lindane)	0.0050 U
75-44-8	Heptachlor	0.030 U
308-00-2	Aldrin	0.0050 U
1024-57-3	Heptachlor Epoxide	0.0050 U
656-98-8	Endosulfan I	0.010 U
60-57-1	Dieldrin	0.010 U
72-55-9	4,4'-DDE	0.0050 U
72-20-8	Endrin	0.010 U
33213-65-9	Endosulfan II	0.010 U
72-64-8	4,4'-DDD	0.020 U
1031-07-8	Endosulfan Sulfate	0.10 U
80-29-3	4,4'-DDT	0.020 U
72-43-5	Methoxychlor	0.020 U
63494-70-6	Endrin Ketone	0.030 U
57-74-8	Chlordane	0.020 U
8001-35-2	Taxaphene	0.25 U
12574-11-2	Aroclor-1016	0.10 U
11104-29-2	Aroclor-1221	0.10 U
11141-16-5	Aroclor-1232	0.10 U
63469-21-0	Aroclor-1242	0.10 U
12672-29-8	Aroclor-1248	0.10 U
11097-69-1	Aroclor-1284	0.10 U
11096-82-5	Aroclor-1260	0.10 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s \approx 1000$ or $W_s \approx NR$

$V_t \approx 5000$

$V_i = 5$

ORGANICS ANALYSIS DATA SHEET
Page 4
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAL

Case No. 7914/3048E

Sample No. ET 125

QC Report No. 3048E

Lab Sample No. 3095205AB

RECEIVED OCT 16 1987

Probability that Identification is Correct:
A= HIGH B= MODERATE C= UNKNOWN D= SOLVENT IMPURITY, see VOA

CAS#	COMPOUND NAME	FRACTION NUMBER	PURITY	SCAN	Estimated CONC.	J VALUE
1. 108-88-3	BENZENE, METHYL-	A/BN	237	940	4.8	UG/L
2. 19456-20-3	1,3-BENZODIOXOL-2-ONE, HEXAHYD	A/BN	378	637	4.0	UG/L
3. 2341-86-8	BENZENAMINE, N-[(PENTAFLUOROPH	A/BN	1439	248	1.8	UG/L
4. 4337-65-9	HEXANEDIOIC ACID, MONO(2-ETHYL	A/BN	1588	836	3.7	UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. BENZENE, METHYL-	1. A+D	1. known 2. see blank
2. 1,3-BENZODIOXOL-2-ONE, HEXAHYD	2. F Dfar	2. see blank
3. BENZENAMINE, N-[(PENTAFLUOROPH	3. C	3.
4. HEXANEDIOIC ACID, MONO(2-ETHYL	4. B Dfar	4. see blank

No volatile Compounds

FORM 1, PART B

Sample Number
ET 125

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ENSECO CAL LAB

Lab Sample ID No: 30952-5

Sample Matrix: WATER

Data Release Authorized By: *Murphy*

Case No: 7914/3048E

QC Report No: 3048E

Contract No: 88-01-7140

Date Sample Received: 8/20/87

RECEIVED OCT 13 1987

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 8/24/87

Conc/Dil Factor: 1 pH: NR

Percent Moisture: NR

Percent Moisture (Decanted): NR

CAS
Number

ug/L

74-87-3	Chloromethane	5 U
74-83-9	Bromomethane	5 U
75-01-4	Vinyl Chloride	5 U
75-00-3	Chloroethane	1 U
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	1 J
75-18-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
186-60-5	Trans-1,2-Dichloroethene	1 U
67-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
78-93-3	2-Butanone	10 U
71-65-6	1,1,1-Trichloroethane	1 U
86-23-6	Carbon Tetrachloride	1 U
108-06-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	1 U

CAS
Number

ug/L

78-34-6	1,1,2,2-Tetrachloroethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-02-6	Trans-1,3-Dichloropropene	1 U
78-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	1 U
78-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-01-6	cis-1,3-Dichloropropene	1 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	1 U
501-79-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	2
108-88-3	Toluene	1 U
108-80-7	Chlorobenzene	1 U
100-41-4	Ethylbenzene	1 U
100-42-6	Styrene	1 U
	Total Xylenes	1 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.

Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides $\geq 10\text{ng}/\text{uL}$ in the final extract should be confirmed by GC/MS.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

B This flag is used when the analysis is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

**Organics Analysis Data Sheet
 (Page 2)**

RECEIVED

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/24/87

Date Analyzed: 9/1/87

Conc/Dil Factor: 1

GPC Cleanup: NO

Separatory Funnel Extraction: YES

Continuous Liquid - Liquid Extraction: NO

CAS Number		ug/L
108-95-2	Phenol	1.0 U
111-44-4	bis(2-Chloroethyl)Ether	1.0 U
95-57-8	2-Chlorophenol	1.0 U
641-73-1	1,3-Dichlorobenzene	1.0 U
106-45-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	1.0 U
30638-32-9	bis(2-chloroethylpropyl)Ether	1.0 U
105-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachloroethane	1.0 U
98-85-3	Mitrobenzene	1.0 U
78-59-1	Isothorone	1.0 U
98-75-5	2-Nitrophenol	1.0 U
105-67-0	2,4-Dimethylphenol	1.0 U
65-85-0	Benzoic Acid	20 U
111-91-1	Methyl-2-Chloroethoxy)Methane	1.0 U
120-83-2	2,4-Dichlorophenol	1.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	1.0 U
87-68-3	Hexachlorobutadiene	1.0 U
98-50-7	4-Chloro-3-Methylbenzol	1.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	1.0 U
88-06-2	2,4,8-Trichlorophenol	1.0 U
88-05-4	2,4,5-Trichlorophenol	1.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
206-96-8	Aconaphthylene	1.0 U
88-09-2	3-Nitroaniline	5.0 U

CAS Number		ug/L
83-32-0	Aconaphthene	1.0 U
81-29-5	2,4-Dinitrophenol	15 U
100-02-7	4-Nitrophenol	15 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	1.0 U
606-20-2	2,6-Dinitrotoluene	1.0 U
84-56-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
834-52-1	4,6-Dinitro-2-Methylphenol	15 U
86-30-6	N-Nitrosodiphenylamine(1)	1.5 U
101-55-3	4-Bromophenyl-phenylether	1.5 U
118-74-1	Hexachlorobenzene	1.5 U
87-06-5	Pentachlorophenol	2.0 U
85-01-8	Phenanthrene	1.0 U
120-12-7	Anthracene	2.5 U
84-74-2	Di-n-Butylphthalate	2.0 U
206-44-0	Fluoranthene	1.8 U
129-00-0	Pyrene	1.5 U
88-63-7	Butylbenzylphthalate	3.5 U
91-94-1	3,5-Dichlorobenzidine	20 U
88-26-8	Benz(a)Anthracene	1.5 U
117-61-7	Methyl-2-Ethylhexyl-Phthalate	20 B
218-01-0	Chrysene	1.5 U
117-84-0	Di-n-Octyl Phthalate	1.5 U
206-97-2	Benz(b)Fluoranthene	1.5 U
207-06-0	Benz(k)Fluoranthene	1.5 U
88-33-8	Benz(a)Pyrene	2.0 U
183-53-5	Indeno[1,2,3-cd]Pyrene	3.5 U
83-70-3	Dibenz(s,h)Anthrapene	2.5 U
181-24-2	Benz(o,g,h,i)Perylene	4.0 U

(1) - Cannot be separated from diphenylamine

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW

GPC Cleanup: NO

Date Extracted/Prepared: 8/21/87

Separatory Funnel Extraction: YES

Date Analyzed: 8/30/87

Continuous Liquid - Liquid Extraction: NO

Conc/Dil Factor: 1

CAS
Number

ug/L

319-84-6	Alpha-BHC	0.010 U
319-85-7	Beta-BHC	0.0050 U
319-86-8	Delta-BHC	0.0050 U
58-89-9	Gamma-BHC (Lindane)	0.0050 U
76-44-8	Heptachlor	0.030 U
309-00-2	Aldrin	0.0050 U
1024-57-3	Heptachlor Epoxide	0.0050 U
659-98-8	Endosulfan I	0.010 U
60-57-1	Dieldrin	0.010 U
72-85-9	4,4'-DDE	0.0050 U
72-20-8	Endrin	0.010 U
33213-65-9	Endosulfan II	0.010 U
72-54-8	4,4'-DDD	0.020 U
1031-07-8	Endosulfan Sulfate	0.10 U
80-29-3	4,4'-DDT	0.020 U
72-43-5	Methoxychlor	0.020 U
83494-70-6	Endrin Ketone	0.030 U
57-74-8	Chlordane	0.020 U
8001-35-2	Taxaphene	0.25 U
12674-11-2	Aroclor-1016	0.10 U
11104-28-2	Aroclor-1221	0.10 U
11141-18-6	Aroclor-1232	0.10 U
83469-21-9	Aroclor-1242	0.10 U
12672-25-6	Aroclor-1248	0.10 U
11097-69-1	Aroclor-1254	0.10 U
11096-82-5	Aroclor-1260	0.10 U

V_i = Volume of extract injected (uL)

V_s = Volume of water extracted (mL)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (uL)

$V_s = 1000$ or $W_s = \text{NR}$

$V_t = 5000$

$V_i = 5$

ORGANICS ANALYSIS DATA SHEET
Page 4

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAL

Case No. 7914/3048E

Sample No. ET 125

GC Report No. 3048E

Lab Sample No. 3095205AB

Probability that Identification is Correct:
A= HIGH B= MODERATE C= UNKNOWN D= SOLVENT IMPURITY, see VOA

CAS#	COMPOUND NAME	FRACTION NUMBER	PURITY	Estimated CONC.	
				SCAN	J VALUE
1. 108-88-3	BENZENE, METHYL-	A/BN	237	940	4.8 ug/L
2. 19456-20-3	1,3-BENZODIOXOL-2-ONE, HEXAHYD	A/BN	378	637	4.0 ug/L
3. 2341-86-8	BENZENAMINE, N-[(PENTAFLUOROPH	A/BN	1439	248	1.8 ug/L
4. 4337-65-9	HEXANEDIOIC ACID, MONO(2-ETHYL	A/BN	1588	856	5.7 ug/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. BENZENE, METHYL-	1. A+D	1. some blank
2. 1,3-BENZODIOXOL-2-ONE, HEXAHYD	2. C Dfar	2. see blank
3. BENZENAMINE, N-[(PENTAFLUOROPH	3. C	3.
4. HEXANEDIOIC ACID, MONO(2-ETHYL	4. B Dfar	4. see blank

No volatile Compounds

FORM 1, PART B

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSO CAL LAB

Contract: 67-01-7140

ET131

Lab Code: _____ Case No.: 7914

SAS No.: 3048E SDG No.: _____

Matrix: (soil/water) WATER

Lab Sample ID: 30952-4

Sample wt/vol: _____ (g/mL)

Lab File ID: _____

Level: (low/med) LOW

Date Received: 8-20-87

% Moisture: not dec.

Date Analyzed: 8-24-87

Column: (pack/cap) _____

Dilution Factor: 1

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-87-3-----	Chloromethane	5	U
74-83-9-----	Bromomethane	5	U
75-01-4-----	Vinyl Chloride	5	U
75-00-3-----	Chloroethane	1	U
75-09-2-----	Methylene Chloride	5	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
540-59-0-----	1,2-Dichloroethene (total)	1	U
67-66-3-----	Chloroform	1	U
107-06-2-----	1,2-Dichloroethane	1	U
78-93-3-----	2-Butanone	1	ST
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
108-05-4-----	Vinyl Acetate	10	U
75-27-4-----	Bromodichloromethane	1	U
78-87-5-----	1,2-Dichloropropane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
79-01-6-----	Trichloroethene	1	U
124-48-1-----	Dibromochloromethane	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
71-43-2-----	Benzene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
75-25-2-----	Bromoform	1	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-88-3-----	Toluene	2	U
108-90-7-----	Chlorobenzene	1	U
100-41-4-----	Ethylbenzene	1	U
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	1	U

108-85-2	Phenol	1.0 U
81-02-6	2,4-Dinitrophenol	15 U
103-02-7	4-Ethoxyphenol	15 U
132-64-8	Dinitrobenzene	15 U
121-14-2	2,4-Dinitrobenzene	15 U
106-66-7	1,4-Dichlorobenzene	1.0 U
64-57-8	2-Chlorophenol	1.0 U
111-44-4	662-(2-Chlorophenoxy)Ether	1.0 U
95-57-8	2-Chlorophenol	1.0 U
100-81-8	Benzyl Alcohol	1.0 U
106-66-7	1,4-Dichlorobenzene	1.0 U
64-55-1	1,3-Dichlorobenzene	1.0 U
106-66-7	1,4-Dichlorobenzene	1.0 U
95-50-6	N-Methyldibutylamine(1)	15 U
101-65-3	4-Aromaphenyl-phenylether	15 U
111-81-1	Nitrobenzene	1.0 U
78-55-1	Isophorone	1.0 U
98-75-5	2-Methylphenol	1.0 U
106-44-5	4-Bromophenyl-phenylether	15 U
100-01-8	4-Nitrophenol	5.0 U
96-73-7	Phenol	15 U
700-62-3	4-Chlorophenyl-phenylether	15 U
96-85-2	Dinitrobenzene	15 U
120-62-1	4-(2-Chloro-2-methylphenyl)-	15 U
63-65-9	Aromaticam	2.8 U
125-00-0	Phenol	15 U
95-66-7	Benzylphenol	2.5 U
97-44-1	3,5-Dichlorobenzene	2.5 U
120-64-0	Phenol	15 U
117-84-0	2,4-Dien-1-phenylphenol	15 U
805-85-2	Benzocyclobutene	15 U
207-02-9	Benzocyclobutene	15 U
185-98-5	Benzocyclobutene	2.5 U
85-70-3	Dinitro-1,2-dihydrophenol	2.5 U
131-11-3	Dinitrophenol	2.5 U
208-95-8	Acenaphthylene	1.0 U
98-02-2	Styrene	8.0 U
(1) - Cannot be separated from diphenoxyamine		

Organics Analysis Data Sheet
(Page 2)

ET 131
Sample Number

RECEIVED 6/24/87 / 6/1987

Labatory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 78143048E

Conc/Dil Factor: 1

Date Analyzed: 8/11/87

Date Extracted/Prepared: 6/24/87

Concentration: Low

Continuous Liquid - Liquid Extraction: NO

Separatory Funnel Extraction: YES

GPC Cleanup: NO

Semivolatile Compounds

CAS Number	Number	ng/l	Conc/Dil Factor
662-(2-Chlorophenoxy)Ether	1.0 U	1.0 U	1.0 U
111-81-1	Nitrobenzene	1.0 U	1.0 U
78-55-1	Isophorone	1.0 U	1.0 U
98-75-5	2-Methylphenol	1.0 U	1.0 U
106-44-5	4-Bromophenyl-phenylether	1.0 U	1.0 U
63-65-9	2-Chlorophenol	1.0 U	1.0 U
100-81-8	Benzyl Alcohol	1.0 U	1.0 U
106-66-7	1,4-Dichlorobenzene	1.0 U	1.0 U
64-55-1	1,3-Dichlorobenzene	1.0 U	1.0 U
106-66-7	1,4-Dichlorobenzene	1.0 U	1.0 U
95-50-6	N-Methyldibutylamine(1)	15 U	1.0 U
101-65-3	4-Aromaphenyl-phenylether	15 U	1.0 U
111-74-1	Heterochlorobenzene	15 U	1.0 U
97-44-1	Aromaticam	2.8 U	1.0 U
94-74-2	Dinitro-1,2-dihydrophenol	2.0 U	1.0 U
206-44-0	Fluorobenzene	1.5 U	1.0 U
125-00-0	Phenol	1.5 U	1.0 U
95-66-7	Benzylphenol	2.5 U	1.0 U
97-44-1	3,5-Dichlorobenzene	2.5 U	1.0 U
120-62-1	4-(2-Chloro-2-methylphenyl)-	15 U	1.0 U
662-(2-Chlorophenoxy)Methane	1.0 U	1.0 U	1.0 U
120-62-1	1,3,4-Trichlorobenzene	1.0 U	1.0 U
97-44-1	Neophylidene	1.0 U	1.0 U
97-44-1	4-Chlorobiphenol	1.0 U	1.0 U
87-55-3	Heptachlorobutadiene	1.0 U	1.0 U
61-57-6	2-Methyl-3-heptyn-3-ol	1.0 U	1.0 U
117-84-0	Dinitro-1-phenylphenol	1.0 U	1.0 U
205-85-2	Benzocyclobutene	1.0 U	1.0 U
207-02-9	Benzocyclobutene	1.0 U	1.0 U
185-98-5	Benzocyclobutene	2.5 U	1.0 U
85-70-3	Dinitro-1,2-dihydrophenol	2.5 U	1.0 U
131-11-3	Dinitrophenol	2.5 U	1.0 U
208-95-8	Acenaphthylene	4.0 U	1.0 U
(1) - Cannot be separated from diphenoxyamine			

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW
Date Extracted/Prepared: 8/21/87
Date Analyzed: 8/30/87
Conc/Dil Factor: 10

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid - Liquid Extraction: NO

RECEIVED OCT 16 1987

CAS Number		ug/l
319-84-6	Alpha-BHC	0.10 U
319-85-7	Beta-BHC	0.050 U
319-86-8	Delta-BHC	0.0050 U
58-89-9	Gamma-BHC (Lindane)	0.050 U
78-44-8	Heptachlor	0.030 U
308-00-2	Aldrin	0.0060 U
1024-57-3	Heptachlor Epoxide	0.0050 U
950-28-8	Endosulfan I	0.010 U
80-57-1	Dieldrin	0.010 U
72-55-9	4,4'-DDE	0.0050 U
72-20-8	Endrin	0.010 U
32213-55-9	Endosulfan II	0.010 U
72-54-8	4,4'-DDO	0.020 U
1031-07-8	Endosulfan Sulfate	0.10 U
80-29-3	4,4'-DDT	0.020 U
72-43-5	Methoxychlor	0.020 U
83494-70-5	Endrin Ketone	0.030 U
57-74-9	Chlordane	0.020 U
8001-35-2	Texaphene	0.25 U
12674-11-2	Aroclor-1016	1.0 U
11104-28-2	Aroclor-1221	1.0 U
11141-18-5	Aroclor-1232	1.0 U
83469-21-8	Aroclor-1242	0.10 U
12672-29-6	Aroclor-1248	0.10 U
11007-68-1	Aroclor-1254	0.10 U
11006-82-5	Aroclor-1260	0.10 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

$V_s = 990$

or $W_s = NR$

$V_t = 50000$

DET

ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAL

Case No. 7914/304BE

Sample No. ET131

QC Report No. 304BE

Lab Sample No. 3095206AB

Probability that Identification is Correct:

A= HIGH B= MODERATE C= UNKNOWN D= SOLVENT IMPURITY, see VDA

Estimated
CONC.

CAS#	COMPOUND NAME	FRACTION NUMBER	PURITY	SCAN	Estimated CONC.	J VALUE
1. 52097-85-5	CYCLOBUTENE, 2-PROPYNYLIDENE-	A/BN	234	922	9.0	UG/L
2. 7206-15-7	4-DODECENE, (E)-	A/BN	377	657	3.8	UG/L
3. 4337-65-9	HEXANEDIOIC ACID, MONO(2-ETHYL	A/BN	1988	761	2.2	UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. CYCLOBUTENE, 2-PROPYNYLIDENE-	1. D	1. isomeric
2. 4-DODECENE, (E)-	2. E, D	2. } see blank
3. HEXANEDIOIC ACID, MONO(2-ETHYL	3. B, D	3. }

✓ FORM 1, PART B

ORGANICS ANALYSIS DATA SHEET
PAGE 4
TENTATIVELY IDENTIFIED COMPOUNDS

LAB NAME: CAL

3048E

CASE NO. 7914 / *3048E*

SAMPLE NO. ET *126*

QC REPORT NO.

LAB SAMPLE NO. 3095206V

131

RECEIVED

ESTIMATED CONC. J VALUE 387

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SEE ABN

CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC.	J VALUE
1. 75-28-5	PROPANE, 2-METHYL-	VDA	67	975	260.9	UG/L

COMPOUND NAME	PROBABILITY	COMMENTS
1. PROPANE, 2-METHYL-	1. <i>B A</i>	

FORM 1, PART B

SAMPLE PROPOSAL
FIT REGION V

✓

1. Date Form Completed 7/15/87
2. Account # F0H0523SI TDD # F05-8703-347
3. EPA I.D. # OHDI03536876
3. Site Name, City, State Town & Country Auto Parts
New Baltimore, Ohio (Hamilton Co.)
4. Team Leader Don Clark Sampler EDD Ron Short
5. Number and Type of Samples:
Soil/Sediment 4-5 Surface Water _____ Ground Water _____
Residential/Municipal Wells 4 Other _____
Number of Blanks 1 Number of Duplicates 1
6. RAS Parameters Requested:
A/B/N Pest/PCB Volatiles Metals Cyanide
SAS Parameters Requested: None
7. Expected Sampling Date(s): Week of August 18-19
Expected Shipping Date(s): same day(s)
8. Lab Used For Analysis: Organic S&T Hazlet Re CAL
Inorganic S&T RMAT Re Chemtech
SAS ↑
9. Case Number 7914 SAS Number 3048E
10. Airbill Numbers:
Organic Lab _____ # Coolers _____ # Samples _____
Inorganic Lab _____ # Coolers _____ # Samples _____
CRL/SAS Lab _____ # Coolers _____ # Samples _____

W

SAMPLE PROPOSAL
FIT REGION V

1. Date Form Completed 7/15/87
2. Account # F0H05235I TDD # F05-8703-347
EPA I.D. # OHD103536876
3. Site Name, City, State Town & Country Auto Parts
New Baltimore, Ohio
4. Team Leader Don Clark Sampler TBD
5. Number and Type of Samples:
Soil/Sediment 4-5 Surface Water _____ Ground Water _____
Residential/Municipal Wells 4 Other _____
Number of Blanks 1 Number of Duplicates 1
6. RAS Parameters Requested:
A/B/N Pest/PCB Volatiles Metals Cyanide
SAS Parameters Requested: None
7. Expected Sampling Date(s): Week of August 16-22 Aug. 18-19
Expected Shipping Date(s): Same day(s)
8. Lab Used For Analysis: Organic _____
Inorganic _____
SAS _____
9. Case Number _____ SAS Number _____
10. Airbill Numbers:
Organic Lab _____ # Coolers _____ # Samples _____
Inorganic Lab _____ # Coolers _____ # Samples _____
CRL/SAS Lab _____ # Coolers _____ # Samples _____

SAMPLE DESCRIPTION

SITE NAME/TODS Town + Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 51 background

SAMPLING DATE 8/18/87 SAMPLING TIME 1730

ORGANIC TRAFFIC NUMBER ET 126

INORGANIC TRAFFIC NUMBER MEU 746

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz	Metals/Cyanide	5-152505	F7206112
8 oz	Organics	5-152506	F7206112
120 ml.	VOA	5-152507	45288032
120 ml.	VOA	5-152508	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Light brown sandy loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TODS Town + Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 52

SAMPLING DATE 8/18/87 SAMPLING TIME 1135

ORGANIC TRAFFIC NUMBER ET 127
INORGANIC TRAFFIC NUMBER MEU 747

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz	Metals/Cyanide	5-152509	F7206112
8 oz	Organics	5-152510	F7206112
120 ml.	VOA	5-152511	45288032
120 ml.	VOA	5-152512	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Moist brown sand
and gravel

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TODS Town & Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 53

SAMPLING DATE 8/18/87 SAMPLING TIME 1210

ORGANIC TRAFFIC NUMBER ET 128
INORGANIC TRAFFIC NUMBER MEU 748

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Metals /cyanide	5-152513	F7206112
8oz	Organics	5-152514	F7206112
120ml.	VOA	5-152515	45288032
120ml.	VOA	5-152516	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Moist Dark Brown Sand and Gravel.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS 11/11/87

pH 7.0

CONDUCTIVITY 1000

TEMPERATURE 72

SAMPLE DESCRIPTION

SITE NAME/TDD: Town & Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 54

SAMPLING DATE 8/18/87 SAMPLING TIME 1705

ORGANIC TRAFFIC NUMBER ET 129
INORGANIC TRAFFIC NUMBER MEU 749

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
9oz	Metals/Cyanide	5-152517	F7206112
8oz	Organics	5-152518	F7206112
120ml.	VOA	5-152519	45288032
120ml.	VOA	5-152520	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Dry dark brown Sandy
Loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH 10.19

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TOD# Town + Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION RW1 - MSD

6950 River Rd.

New Baltimore, OH 45030

SAMPLING DATE 8/19/87

SAMPLING TIME 9:15

ORGANIC TRAFFIC NUMBER ET 121

INORGANIC TRAFFIC NUMBER MEU 751

BOTTLE	ANALYSIS	TAG NUMBERS	MSD	LOT NUMBER	MSD
1 liter amber	organics	5-152553, 5-152558	H7134142	H7133302	
1 liter amber	organics	5-152554, 5-152559	H7134142	H7133302	
1 liter amber	organics	5-152555, 5-152560	H7134142	H7133302	
1 liter plastic	Metals	5-152551	C7173112		
1 liter plastic	Cyanide	5-152552	C7173112		
40 ml. VOA	VOA	5-152556, 5-152561	B7132131		
40 ml. VOA	VOA	5-152557, 5-152562	B7132131		

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 6.92

CONDUCTIVITY 1200 m.moles

TEMPERATURE 17°C

SAMPLE DESCRIPTION

SITE NAME/TOD# Town & Country F05-8703-347
CASE NUMBER 7914 / 3048.E

SAMPLE #/STATION LOCATION RW2 6800 River Rd.
SAMPLING DATE 8/19/87 New Baltimore, OH 45030
SAMPLING TIME 1010

ORGANIC TRAFFIC NUMBER ET.122
INORGANIC TRAFFIC NUMBER MEU 752

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-152565	H7133302
1 liter amber	organics	5-152566	H7133302
1 liter amber	organics	5-152567	H7133302
1 liter plastic	Metals	5-152563	C7173112
1 liter plastic	Cyanide	5-152564	C7173112
40 ml. VOA	VOA	5-152568	B7132131
40 ml. VOA	VOA	5-152569	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/APHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 6.99CONDUCTIVITY 1200 m.m.cTEMPERATURE 17° C

SAMPLE DESCRIPTION

SITE NAME/TODI Town & Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION RW 3 10250 Tule Ln.
New Baltimore, OH 45030
SAMPLING DATE 8/19/87 SAMPLING TIME 1050

ORGANIC TRAFFIC NUMBER ET, 123
INORGANIC TRAFFIC NUMBER MEU 753

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 72	H7133302
1 liter amber	organics	5-1525 73	H7133302
1 liter amber	organics	5-1525 74	H7133302
1 liter plastic	Metals	5-1525 70	C7173122
1 liter plastic	Cyanide	5-1525 71	C7173122
40 ml. VOA	VOA	5-1525 75	B7132131
40 ml. VOA	VOA	5-1525 76	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 7.19

CONDUCTIVITY 500 m.m.

TEMPERATURE 20°C

SAMPLE DESCRIPTION

SITE NAME/TOD# Town + Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE#/STATION LOCATION RW4 6959 River Rd.
New Baltimore, OH 45030
SAMPLING DATE 8/19/87 SAMPLING TIME 1/30

ORGANIC TRAFFIC NUMBER ET. 124
INORGANIC TRAFFIC NUMBER MEU 754

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 79	H7133302
1 liter amber	organics	5-1525 80	H7133302
1 liter amber	organics	5-1525 81	H7133302
1 liter plastic	Metals	5-1525 77	C7173122
1 liter plastic	Cyanide	5-1525 78	C7173122
40 ml. VOA	VOA	5-1525 82	B7132131
40 ml. VOA	VOA	5-1525 83	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS
pH 7.22
CONDUCTIVITY 1000 m.m.
TEMPERATURE 23°C

SAMPLE DESCRIPTION

SITE NAME/TOD# Town + Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION Duplicate 6959 River Rd.
SAMPLING DATE 8/19/87 SAMPLING TIME 1130

ORGANIC TRAFFIC NUMBER ET 125
INORGANIC TRAFFIC NUMBER MEU 755

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 86	H7134132
1 liter amber	organics	5-1525 87	H7134132
1 liter amber	organics	5-1525 88	H7134132
1 liter plastic	Metals	5-1525 84	C7173122
1 liter plastic	Cyanide	5-1525 85	C7173122
40 ml. VOA	VOA	5-1525 89	B7132131
40 ml. VOA	VOA	5-1525 90	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS
pH 7.22
CONDUCTIVITY 1000 mm.
TEMPERATURE 23° C.

SAMPLE DESCRIPTION

SITE NAME/TOD# Town + Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION Blank

SAMPLING DATE 8/19/87 SAMPLING TIME 1000

ORGANIC TRAFFIC NUMBER ET, 131
INORGANIC TRAFFIC NUMBER MEU 756

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 93	H7134132
1 liter amber	organics	5-1525 94	H7134132
1 liter amber	organics	5-1525 95	H7134132
1 liter plastic	Metals	5-1525 91	C7173112
1 liter plastic	Cyanide	5-1525 92	C7173112
40 ml. VOA	VOA	5-1525 96	B7132131
40 ml. VOA	VOA	5-1525 97	B713213-1

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS
PH 5.88
CONDUCTIVITY 0
TEMPERATURE 28°

WELL LOG AND DRILLING REPORT

ORIGINAL

PLEASE USE PENCIL
OR TYPEWRITER
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

No. 291498

County Hamilton Township Crosby Section of Township 16

Owner Frank Tucker Address RT 1 Harrison, O

Location of property New Baltimore, O.

CONSTRUCTION DETAILS

BAILING, OR PUMPING TEST

Casing diameter	<u>6"</u>	Length of casing	<u>62</u>	Pumping Rate.....	G.P.M.	Duration of test.....	hrs.
Type of screen.....		Length of screen.....		Drawdown.....	ft.	Date	<u>12/10/64</u>
Type of pump.....				Static level-depth to water.....	ft.		
Capacity of pump.....				Quality (clear, cloudy, taste, odor).....			
Depth of pump setting.....				Pump installed by.....			
Date of completion.....							

WELL LOG

SKETCH SHOWING LOCATION

Formations	From	To	Locate in reference to numbered State Highways, St. Intersections, County roads, etc.
Sandstone, shale, limestone, gravel and clay			
Top soil	0	2	N.
Red clay	2	4	
Coarse gravel	4	26	
Blue clay	26	61 1/2"	
Shale	61 1/2"	70	
Water at	63'		
			E.

See reverse side for instructions

Drilling Firm Wm CraneDate 12/10/64Address Shandon, O.Signed Wm Crane

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCESDivision of Water
Columbus, Ohio

Nº 145698

County Hamilton Township Crosby Section of Township or Lot Number 16
 Owner Loren Hark Address Harrison O Pt #1
 Location of property New Baltimore O

CONSTRUCTION DETAILS

PUMPING TEST

Casing diameter 5" Length of casing 28'
 Type of screen Cook brass Length of screen 4'
 Type of pump _____
 Capacity of pump _____
 Depth of pump setting _____

Pump installed by _____
 Pumping rate G.P.M. Duration of test hrs.
 Drawdown ft. Date 12/12/55
 Developed capacity gpm ft. 2.5
 Static level—depth to water 217 ft.

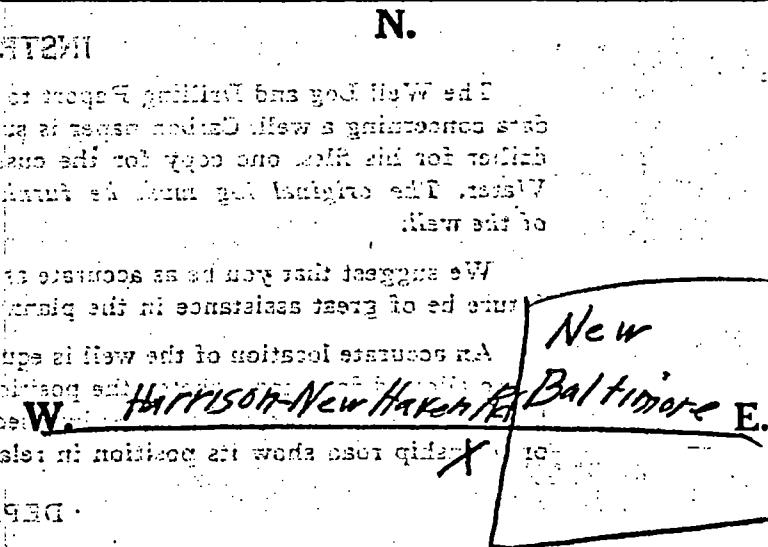
WELL LOG

SKETCH SHOWING LOCATION

Formations Sandstone, shale, limestone, gravel and clay From 0 To 32.5'

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

	0 Feet	Ft.
<u>Top soil & sand</u>	<u>0</u>	<u>18'</u>
<u>Gravel</u>	<u>18'</u>	<u>32.5'</u>
<u>Clay</u>		
<u>Below</u>		



STATEMENT ON MINERAL RESOURCES

There are no mineral resources in the well.

S.

See reverse side for instructions

Drilling Firm Wm Crane
 Address Shanahan O

Date 5/5/55

Signed Wm Crane

OHIO WATER RESOURCES BOARD

Well Record No. 489

31 Crosby 3

Co. Hamilton Twp. Colerain Sec. 16
 Well Location S.E. part of Town Size 6" X 53 $\frac{1}{2}$ "
 Within 100 ft. of Miami River Map Hamilton
 Baltimore Gardens,
 Owner Stanley Schulze Address New Baltimore, O.
 Driller Hyden Brothers Date 3-10-49

Well Head Elev. or M. P.

Elev. of Ground at Well

Pumping Test: Approx. 800 G.P.H.

Static Level Date 3-10-49

Normal Pumpage

Quality Use

Adequacy of supply

Owner's Well No. or Other Designation

Source of Data Driller

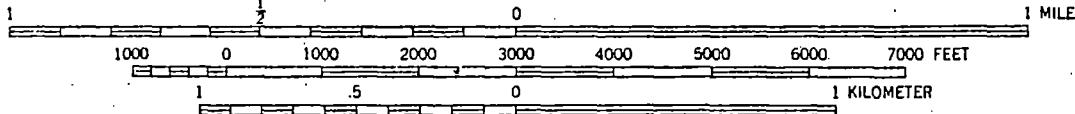
Collected by cb Date 1949

73502	STRATA	DEPTH	
		From	To
	Sand & gravel	0	19
	Blue mud		53
	Hard shale (gray)		85
		5	
	Type of pump: $\frac{1}{2}$ h.p. Jet		
	Capacity: 350 G.P.H.		
	Depth of setting: 63 ft.		
X	1,386,800		
Y	467,800 S		
	* Chief Aquifer		



42°30' 608 S. 52° 2.8 MI. MIAMI STATION 2.7 MI. (ADDYSTON) 4062 11 NW R. I. T. 1 R. I. T. 2 BARNESBURG 2.5 MI. 703000 m. E. • • INTERIOR—GEOLOGICAL SURVEY WAS

SCALE 1:24 000



CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

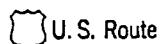


QUADRANGLE LOCATION

ROAD CLASSIFI:

Heavy-duty _____ Li

Medium-duty _____ Ur



SHA

SW/4 1/4

N39

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242



1974 Survey - New Baltimore

OEPAs (HOSLER) 2/HAM. CO. H.D.

			CONTAMINANT	TESTED FOR																				
	R	BLOEDINGER		Mg/L																				
X	10	Jones Well	②	8200	630	53	0	92	58	0	0	920	0	103	38	3	70	190	7.8	5	0			
	C-3	James Again	②	1370	0	1360	1370	370	300	400	0	30	7	132	45	32	0	9800	0	100	0.1			
4	X-3	Hewelike Inn	③	7110	2786	12.8	1250	?	?	0	0	70	-	153	39	-	0	6800	0	60	0.2			
X	1	KOENIGER'S WELL	(DISS)	2020	1222	SP-600	-	400	260	0	0	70	-	153	39	-	0	6800	0	60	0.2			
X	4	ALLEN'S 100' DEEP	④	1160	844	81	1.87	250	172	300	400	0	10	0	116	42	4	60	1200	0.2	0.5	0		
		Front of		1280	952	0	3.8	245	216	200	400	0	70	3	100	35	36	40	6800	0.2	240	0.4		
X		ECKERIE WELL	⑤	621	761	41	.06	13	11	-	400	400	1130	0	87	30	7	1050	130	21.4	1.5	0		
		Front of		550	700	50	.01	13	11	-	400	400	1130	0	87	30	7	1050	130	21.4	1.5	0		
X		THOROUGHFAKES WELL	⑥	510	350	28	0.33	12	8	0	0	0	1080	0	77	27	8	0	1630	0.1	8.0	0		
		Front of		1720	780	43	.09	156	156	0	0	0	1080	0	77	27	8	0	1630	0.1	8.0	0		
X	4	E MOON WELL	⑦	940	706	56	.09	115	54	0	700	-	2670	0	20	44	8	40	230	1060	9.5	0		
		Front of		1510	322	5.0	.02	3	19	0	0	0	460	0	77	21	4	40	1190	0.1	3.5	0.1		
X	6	WELCH CONSTRUCTION WELL	⑧	450	330	5.0	.02	3	19	0	0	0	460	0	77	21	4	40	1190	0.1	3.5	0.1		
		Front of		950	878	6.0	.05	120	160	0	300	0	760	0	82	29	21	0	2510	0.1	<0.5			
	2	TREBESLER COMET GAS STATION	⑨	650	478	3.77	0	0	0	0	0	0	570	0	66	28	12	0	1630	0.1	7.5	0.2		
		Front of		650	478	4.0	5.84	45	77	0	0	0	570	0	66	28	12	0	1630	0.1	7.5	0.2		
X		WARDWELL'S WELLSITE	⑩	510	396	67	0	10	8	200	0	0	210	0	31	30	0	0	1130	1.3	3.5	0.1		
	3	LUCAS' WELL		550	404	35	0.0	49	32	400	300	0	140	0	73	26	4	180	260	5.0	2.5	0.4		
	4	NEW BALTIMORE WELLCUT		630	438	8	3.27	18	18	0	300	0	320	0	88	37	4	520	4250	0.2	4.0	0.7		
		Front of		1150	588	10	.00	13	50	200	0	0	930	0	88	21	4	80	1700	1.8	0	0.1		
X	4	WILWEST WELL SPANIE	⑪	1300	784	43	.09	143	0	10	445	200	300	0	1240	0	134	45	0	250	100	112	0.5	0
		Front of		860	678	48	0	10	445	200	300	0	1240	0	134	45	0	250	100	112	0.5	0		
Z		HENSLER WELL	⑫	850	646	93	0.16	100	40.5	200	300	0	10	0	124	44	0	40	100	2.3	1.5	0		
	1	GILL'S WELL		360	252	38	0.47	13	8	0	0	46	90	0	57	18	4	170	200	3.12	5.5	0.1		
	4	New Baltimore Auto Parts		470	490	15	2.85	5	13	1000	400	-	110	0	85	29	8	0	1920	0	3.0	0.1		
		New Baltimore Auto Parts		880	660	49	.02	100	66	200	300	-	300	0	126	42	0	90	0	8.9	0.5	0.0		
		Fort Scott Camp		524	310	.08	33													2.15				

EXCEESSES PRIMARILY OR SECONDARY STANDARD
PROBABLY WOULD EXCEED STANDARD IF ADJUSTED



Wells sampled by EPA
in NEW Baltimore

~~11/7/74~~ 11/7, 14/74

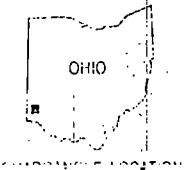
- ✓ 1-Wyest ✓
- ✓ 2-Home like Inn ✓
- ✓ 3-Hen scler ✓
- ✓ 4-New Baltimore Auto Parts Shallow well ✓
- ✓ 5- " " " Deep Well ✓
- ✓ 6-Jones well ✓
- ✓ 7-Tresler Comet Gas station ✓
- ✓ 8-New Baltimore market ✓
- ✓ 9-Wilson ✓
- ✓ 10-Allen ? ✓
- ✓ 11-Wardwell ✓
- ✓ 12-Lucas ✓
- ✓ 13-Eckerle ? ✓
- ✓ 14-Gill (Gastern) ✓
- ✓ 15-Trunk ? — (CISTERN) ? ✓
- ✓ 16-Moan ✓
- ✓ 17-Thoroughmon ✓
- ✓ 18-KOELLER ✓
- ✓ 19-WELCH CONSTRUCTION ✓
- ✓ 20-BLOEMKE - same as N. B. auto parts shallow well ✓





000 R. I. T. 1 R. I. T. 2 701 40° BARNESBURG 2.5 MI.
4000
4000 5000 6000 7000 FEET
1 KILOMETER

'AL 10 FEET
SEA LEVEL.



ROAD CLASSIFICATION

Heavy-duty _____ Light-duty _____
Medium-duty _____ Unimproved dirt = = =



SHANDON, O.

COUNTY MAP 1:250,000

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCESDivision of Water
Columbus, Ohio

No 172574

County Hamilton Township Crosby Section of Township 17
or Lot Number.Owner M C Pottenger Address Harrison O'BrienLocation of property about 1/2 mile N.E. of New Haven, Harrison Co., Ohio**CONSTRUCTION DETAILS****PUMPING TEST**

Casing diameter 6" Length of casing 43
 Type of screen Freeman #30 Length of screen 7'
 Type of pump _____
 Capacity of pump _____
 Depth of pump setting _____

Pumping rate G.P.M. Duration of test hrs.
 Drawdown at static point ft. Date 5/4/52
 Developed capacity _____
 Static level—depth to water 27 6 ft.
 Pump installed by _____

WELL LOG**SKETCH SHOWING LOCATION**

Formations Sandstone, shale, limestone, gravel and clay From 0 To 50

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

0 Feet Ft.

N.

Top soil 0 12 Bottom Hatch
Gravel 12 30

Med gravel 30 50

Clay 50

E.

DEPARTMENT OF NATURAL RESOURCES

JULY 13 1952

REG. NO. 88321

HARRISON COUNTY

Drilling Firm Wm CraneAddress Shandon ODate 5/4/52Signed Wm Crane

S.

See reverse side for instructions

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCESDivision of Water
Columbus, Ohio

No 172574

County Hamilton Township CrosbySection of Township
or Lot Number 17Owner M C Pottenger Address Harrison O'Brien

Location of property

CONSTRUCTION DETAILS

PUMPING TEST

Casing diameter 6" Length of casing 43Pumping rate G.P.M. Duration of test hrs.Type of screen Freeman 230 Length of screen 7'Drawdown ft. Date 5/4/52

Type of pump

Developed capacity

Capacity of pump

Static level—depth to water 27' 6" ft.

Depth of pump setting

Pump installed by

WELL LOG

SKETCH SHOWING LOCATION

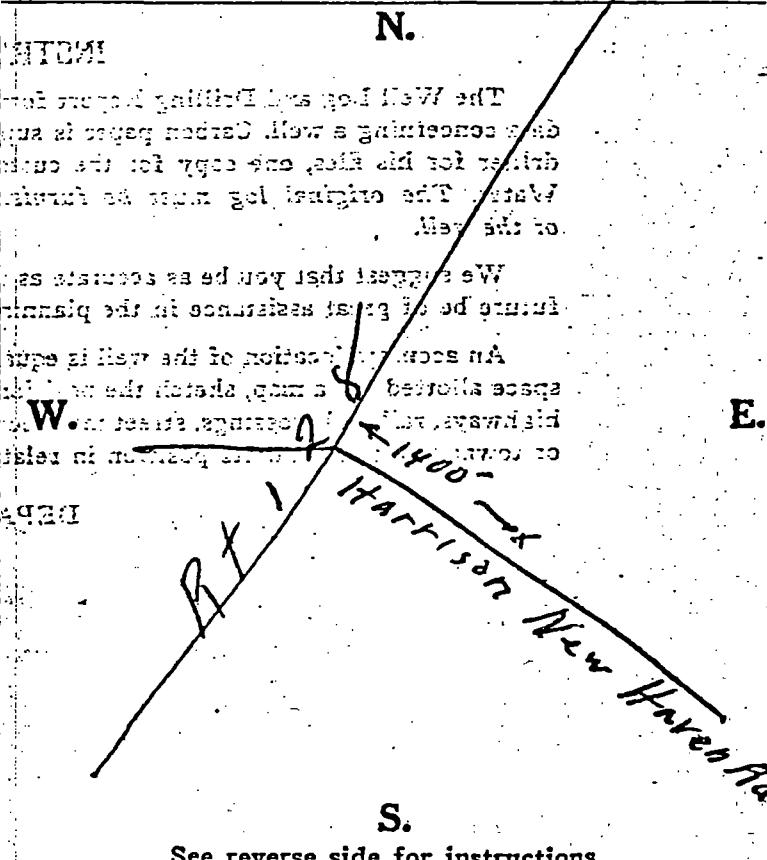
Formations	Thickness in ft.	From	To
Sandstone, shale, limestone, gravel and clay			

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

	0 Feet	Ft.	
Top soil	0	12	N.
Gravel	12	30	W.
Med gravel	30	50	E.
Clay	50	60	S.

RECORDS MADE ON THIS FORM BY THE STATE OF OHIO
TO BE USED IN CONSIDERATION OF THE
REGULATIONS OF THE DEPARTMENT OF NATURAL
RESOURCES OF THE STATE OF OHIO
FOR THE PROTECTION OF THE PUBLIC
WELL LOGS ARE NOT TO BE USED AS
EVIDENCE IN ANY COURT OF LAW
EXCEPT AS PROVIDED IN THE
REGULATIONS OF THE DEPARTMENT OF NATURAL
RESOURCES OF THE STATE OF OHIO.
THESE REGULATIONS ARE PUBLISHED
IN THE OHIO REGISTER OF STATE
REGULATIONS.

RECORDED
ON MAY 10, 1952
AT 10:30 AM
BY W. M. CRANE
FOR HARRISON O'BRIEN



See reverse side for instructions

Drilling Firm Wm CraneDate 5/4/52Address Shandon O'BrienSigned Wm Crane

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCESDivision of Water
Columbus, Ohio

Nº 145698

County Hamilton Township Crosby Section of Township or Lot Number 16
 Owner Loren Hagan Address Harrison O Pt #1
 Location of property New Baltimore O

CONSTRUCTION DETAILS

Casing diameter <u>5"</u>	Length of casing <u>28'</u>	Pumping rate <u>G.P.M.</u>	Duration of test <u>hrs</u>
Type of screen <u>Cook brass</u>	Length of screen <u>4'</u>	Drawdown <u>ft.</u>	Date <u></u>
Type of pump <u></u>		Developed capacity <u>gpm</u>	
Capacity of pump <u></u>		Static level—depth to water <u>217</u>	ft
Depth of pump setting <u>Isometric line connecting bottom of casing and top of pump</u>		Pump installed by <u></u>	

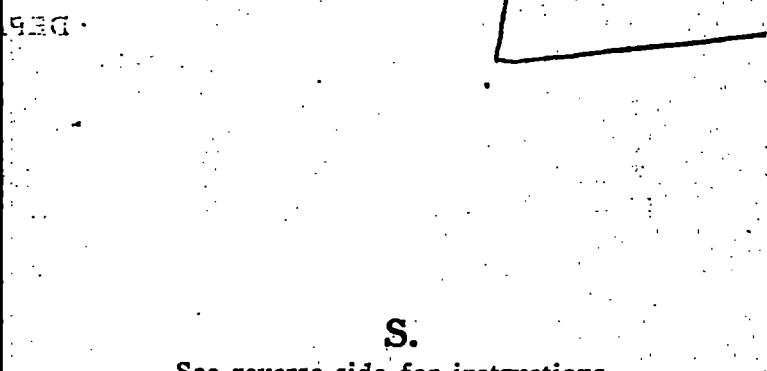
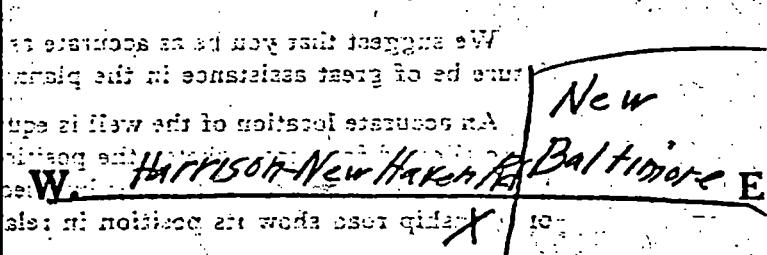
WELL LOG

Formations	Thickness	Depth From	Depth To
Sandstone, shale, limestone, gravel and clay			

	0 Feet	Ft.	N.
Top soil & sand	0	18'	
Gravel	18'	32.5'	
Clay			

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



S.

See reverse side for instructions

Drilling Firm Wm CraneAddress Shandon ODate 5/5/55Signed M. Crane

WELL LOG AND DRILLING REPORT

PLEASE USE PENCIL
OR TYPEWRITER
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

No. 291498

County Hamilton Township Crosby Section of Township 16
 Owner Frank Tucker Address Rt 1 Harrison, O
 Location of property New Baltimore, O

CONSTRUCTION DETAILS		BAILING OR PUMPING TEST		
Casing diameter	6"	Length of casing	62	Pumping Rate G.P.M. Duration of test hrs.
Type of screen		Length of screen	—	Drawdown ft. Date 12/10/64
Type of pump				Static level-depth to water 42 ft.
Capacity of pump				Quality (clear, cloudy, taste, odor)
Depth of pump setting				
Date of completion				Pump installed by

WELL LOG				SKETCH SHOWING LOCATION	
Formations	From	To	Ft.	Locate in reference to numbered State Highways, St. Intersections, County roads, etc.	
Sandstone, shale, limestone, gravel and clay	0 Feet			N. New Haven Rd	
Top soil	0	2	2		
Red clay	2	4	4		
Coarse gravel	4	26	26		
Blue clay	26	61 1/2"	61 1/2"		
Shale	61 1/2"	70	70	E. Blue Rock Lane	
Water at	63'			S.	
				Miami River	

Drilling Firm Wm Crane Date 12/10/64
 Address Shandon, O Signed Wm Crane

WELL LOG AND DRILLING REPORT

ORIGINAL

PLEASE USE PENCIL
OR TYPEWRITER
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

NO 291473

County Hamilton Township Crosby Section of Township 16
 Owner Matilda Kelsch Address 2122 Kemper Ln, Cincinnati, O.
 Location of property New Baltimore, O.

CONSTRUCTION DETAILS

BAILING OR PUMPING TEST

Casing diameter 6" Length of casing 28
 Type of screen Length of screen
 Type of pump
 Capacity of pump
 Depth of pump setting
 Date of completion

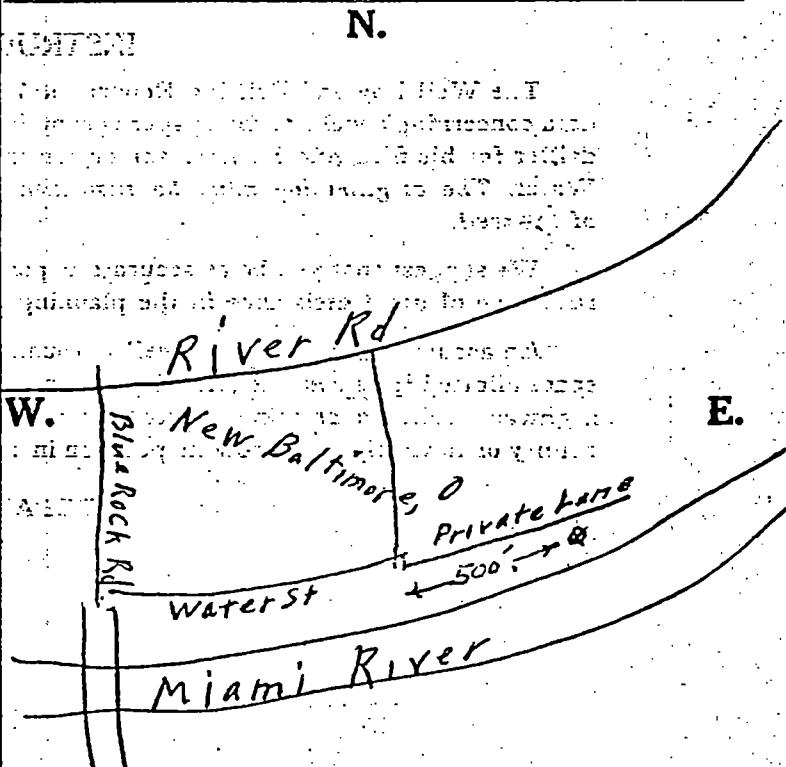
Pumping Rate G.P.M. Duration of test hrs.
 Drawdown ft. Date 10/2/63
 Static level-depth to water 24' ft.
 Quality (clear, cloudy, taste, odor) O.K.
3 gpm bailed test
 Pump installed by

WELL LOG

SKETCH SHOWING LOCATION

Formations	From	To	
Sandstone, shale, limestone, gravel and clay	0 Feet	Ft.	
<u>Top soil</u>	<u>0</u>	<u>1</u>	
<u>Coarse gravel</u>	<u>1</u>	<u>16</u>	
<u>Blue clay</u>	<u>16</u>	<u>26</u>	
<u>Shale</u>	<u>26</u>	<u>50</u>	
<u>Water at</u>	<u>30</u>	<u>44'</u>	

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.



S.
See reverse side for instructions

Drilling Firm Wm Crane
 Address Shandon, O.

Date 10/2/63

Signed Wm Crane

WELL LOG AND DRILLING REPORT

ORIGINAL

NO CARBON PAPER
NECESSARY—
SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
65 S. Front St., Rm. 815 Phone (614) 469-2646
Columbus, Ohio 43215

435586

County Hamilton Township Crosby Section of Township 17
Owner Bradford Estes Address 698 River Rd
Location of property Sand (New Bolamore) HARRISON OHIO 45030

CONSTRUCTION DETAILS

BAILING OR PUMPING TEST
(Specify one by circling)Casing diameter 4 Length of casing 50Test Rate 20 G.P.M. Duration of test _____ hrs

Type of screen _____ Length of screen _____

Drawdown _____ ft. Date _____

Type of pump _____

Static level-depth to water _____ ft.

Capacity of pump _____

Quality (clear, cloudy, taste, odor) _____

Depth of pump setting _____

Date of completion _____

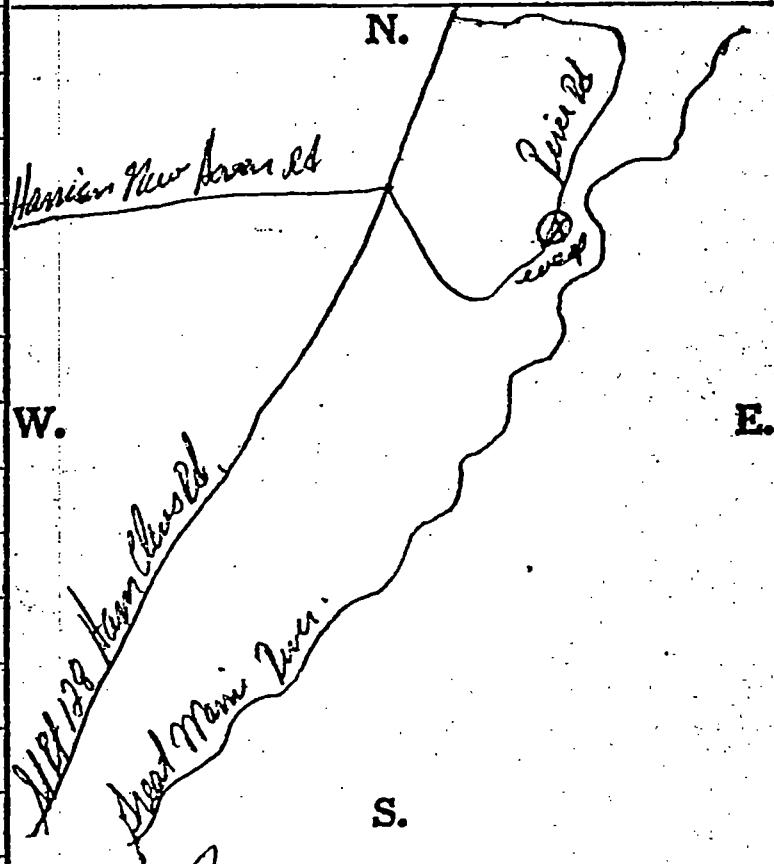
Pump installed by _____

WELL LOG*

SKETCH SHOWING LOCATION

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.

Formations	From	To
Sandstone, shale, limestone, gravel and clay		
Top Soil	0 Feet	1 Ft.
Sub Soil	1	2
Clay Gravel	2	8
Gravel	8	30
Blue Clay	30	50



Drilling Firm HOOVER WELL DRIL
Address 4253 SCIPIO RD HAM·OHIO

Date June 28-1972Signed J. M. Johnson

*If additional space is needed to complete well log, use next consecutive numbered form.

WELL LOG AND DRILLING REPORT

PLEASE USE PENCIL
OR TYPEWRITER.
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio

No. 230004

County HAMILTON Township Clinton Section of Township _____

Owner VIRGINIA CARALINA Address FERNALD, OHIO

Location of property FERNALD OHIO Corner of Franklin Rd & New Haven Rd

CONSTRUCTION DETAILS		BAILING OR PUMPING TEST	
Casing diameter	<u>8"</u>	Length of casing	<u>86'</u>
Type of screen	<u>Wire</u>	Length of screen	<u>15'</u>
Type of pump	<u>BROWN JACKSON</u>	Developed capacity	
Capacity of pump	<u>160 G.P.M.</u>	Static level—depth to water	<u>12'</u>
Depth of pump setting	<u>96' - 00"</u>	Pump installed by	<u>Posey</u>
Date of completion	<u>1957</u>		

WELL LOG			SKETCH SHOWING LOCATION	
Formations	From	To	Locate in reference to numbered State Highways, St. Intersections, County roads, etc.	
Sandstone, shale, limestone, gravel and clay				
MUD SAND	0 Feet	20 Ft.	N.	
MUD SAND	20	50'		
COURSE SAND	50	70		
MUD SAND	70	100	W. New Haven Rd	E.

See reverse side for instructions

Drilling Firm A.R. Posey Co. Date 1-20-59

Address 246 Corpton Ridge Signed M. SCHNEIDER 33

DRY

Town 1 Sec. 1 4 E. 14 N. 12 W.

WEI LOG AND DRILLING REPORT

ORIGINAL

**NO CARBON PAPER
NECESSARY—
SELF-TRANSCRIBING**

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
65 S. Front St., Rm. 815 Phone (614) 469-2646
Columbus, Ohio 43215

No. 402900

Columbus, Ohio 43215

Owner F & C Sand & Gravel Co Address Miamitown, O

Location of property. _____

Debtors File Wm C. Farnie

Address Box 33 Shandon, O

8/28/71 22

Signed William Leonard

*If additional space is needed to complete well log, use next consecutive numbered form.

WELL LOG AND DRILLING REPORT

ORIGINAL

PLEASE USE PENCIL
OR TYPEWRITER.
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio

No. 263172

County Hamilton Township COLERAIN Section of Township.....

Owner Robert Mertz Address 5523, Dry Ridge Rd.
CINCINNATI, OHIO

Location of property HOME AS SHOWN

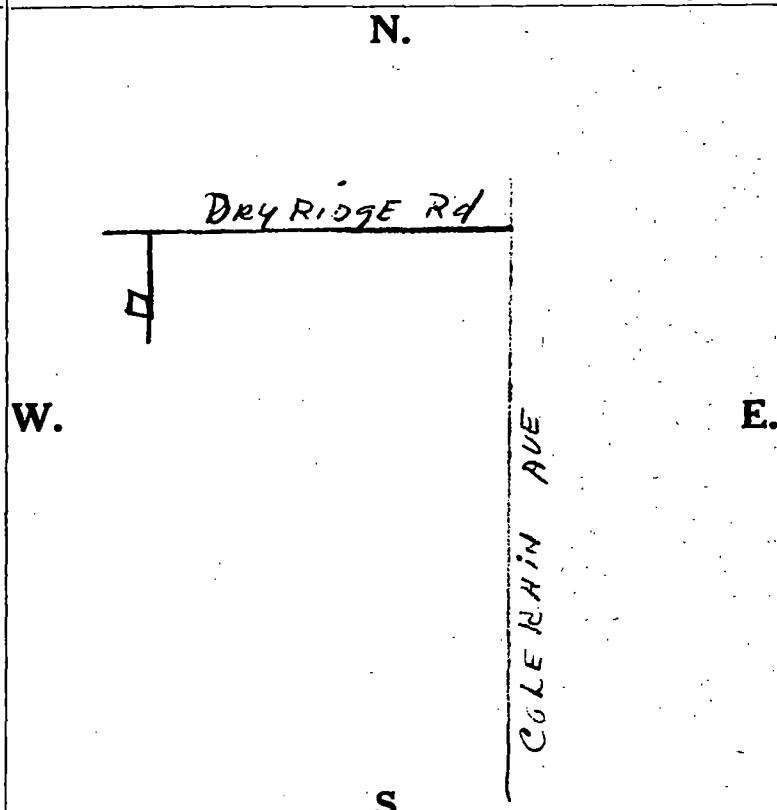
CONSTRUCTION DETAILS		BAILING OR PUMPING TEST
Casing diameter <u>6 1/2</u>	Length of casing <u>32'</u>	Pumping rate <u>1 1/2</u> G.P.M. Duration of test <u>1</u> hrs.
Type of screen.....	Length of screen.....	Drawdown <u>70</u> ft. Date <u>3-3-61</u>
Type of pump <u>DEED WELL</u>	.....	Developed capacity <u>1 1/2</u> G.P.M.
Capacity of pump <u>220 G.P.H.</u>	.....	Static level—depth to water <u>30</u> ft.
Depth of pump setting <u>95'</u>	.....	Pump installed by <u>SUBURBAN WELL DRILLING</u>
Date of completion <u>3-3-61</u>	.....

WELL LOG

Formations	From	To
Sandstone, shale, limestone, gravel and clay		
CLAY	0 Feet	18 Ft.
CLAY & SHALE	18	27
LIMESTONE Rock + SHALE	27	100
WATER at 40'		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm SUBURBAN WELL DRILLING

Address R#1, BOX 8 MELBOURNE KY

Date 4-17-61

Signed James Hyden 15

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
 DEPARTMENT OF NATURAL RESOURCES
 Division of Water
 Columbus, Ohio

Nº 95441

1,390.80
478.40 \$

County Hamilton Township Colerain Section of Township or Lot Number 30

Owner Geo Gausman Address Mt Healthy D Rt #4

Location of property E Miami River Rd

CONSTRUCTION DETAILS

Casing diameter 4"
brass #30 Length of casing 31'
 Type of screen Miami Length of screen 3'
 Type of pump
 Capacity of pump
 Depth of pump setting

PUMPING TEST

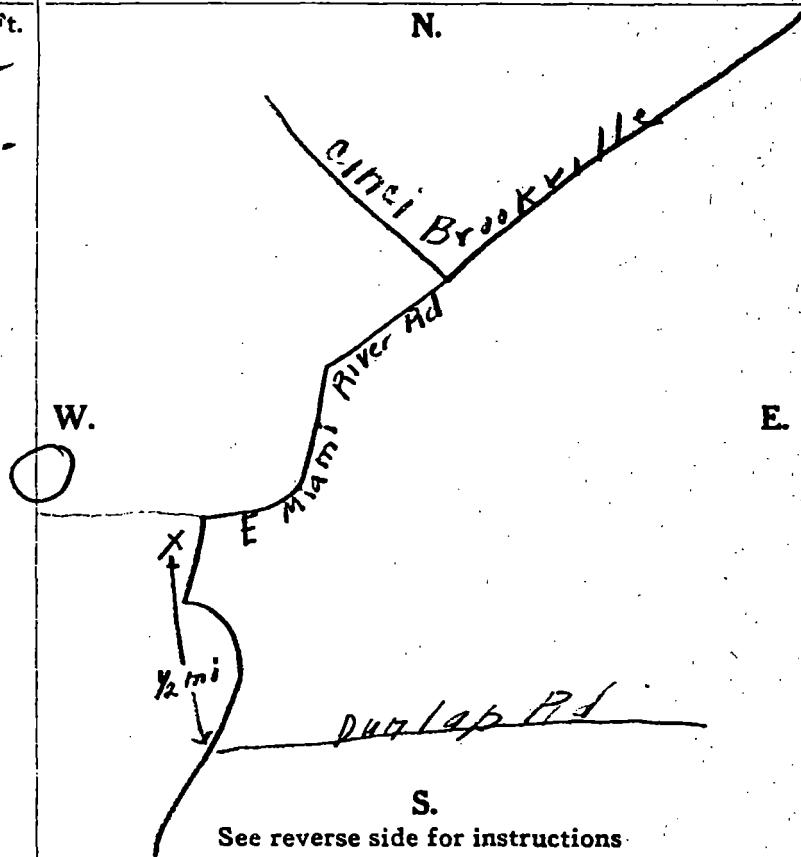
Pumping rate G.P.M. Duration of test hrs.
 Drawdown ft. Date
 Developed capacity
 Static level—depth to water 260 11/12/52 ft.
 Pump installed by

WELL LOG

Formations	From	To
Sandstone, shale, limestone, gravel and clay	0 Feet	..... Ft.
Top soil	0	6'
Sand & gravel	6'	34'
Below 34' shale		
<i>Southwestern Water Co well here</i>		

SKETCH SHOWING LOCATION

Locate in reference to numbered
 State Highways, St. Intersections, County roads, etc.



Drilling Firm Wm Crane

Date 11/12/52

Address Shandon D.

Signed Wm Crane HV

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
 DEPARTMENT OF NATURAL RESOURCES
 Division of Water
 Columbus, Ohio

N° 173086

County Huron Co. Township Corraine Section of Township _____
 or Lot Number _____
 Owner Ed Watterman Address Berlin Rd.
 Location of property Berry Rd.

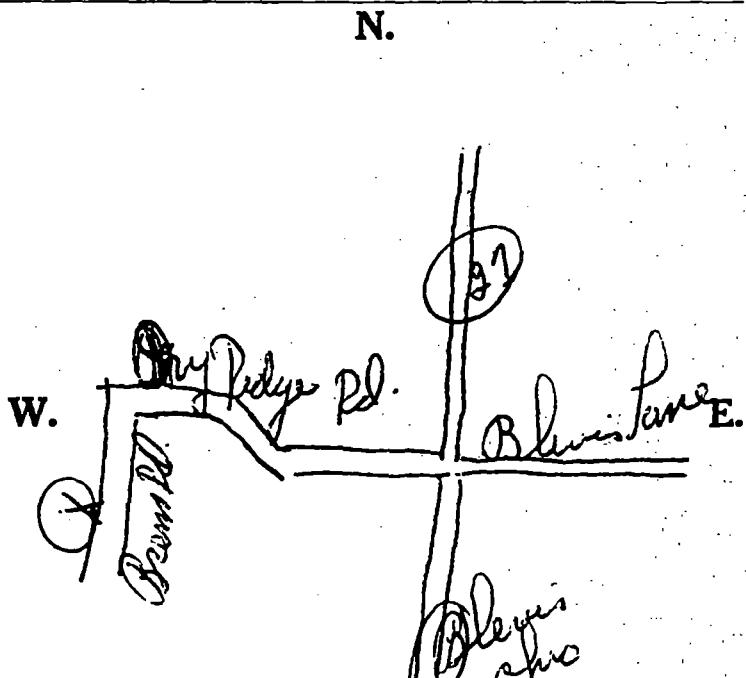
CONSTRUCTION DETAILS		PUMPING TEST	
Casing diameter <u>6 1/4</u>	Length of casing <u>47</u>	Pumping rate.....G.P.M.	Duration of test.....hrs.
Type of screen.....	Length of screen.....	Drawdown.....ft.	Date.....
Type of pump.....	.....	Developed capacity.....	.....
Capacity of pump.....	.....	Static level—depth to water.....	ft.
Depth of pump setting.....	.....	Pump installed by.....	.....

WELL LOG

Formations	From	To
Sandstone, shale, limestone, gravel and clay	0 Feet	2 Ft.
top soil		
Sub-soil	2	4
Clay	4	48
Stone	48	118

SKETCH SHOWING LOCATION

Locate in reference to numbered
 State Highways, St. Intersections, County roads, etc.



S.

See reverse side for instructions

Drilling Firm J.B. HooverDate 12-20-56Address 4253 Laysan Rd.Signed J.B. Hoover

35

WELL LOG AND DRILLING REPORT

ORIGINAL

**PLEASE USE PENCIL
OR TYPEWRITER
DO NOT USE INK.**

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

Nº 352405

County Hamilton Township Colerain Section of Township 93
 Owner HAROLD Helton Contractor Address 6300 Day Rd
 Location of property 6300 DAY Rd CIN. OHIO

CONSTRUCTION DETAILS

Casing diameter 4" Length of casing 75
 Type of screen _____ Length of screen _____
 Type of pump _____
 Capacity of pump _____
 Depth of pump setting _____
 Date of completion _____

BAILING OR PUMPING TEST

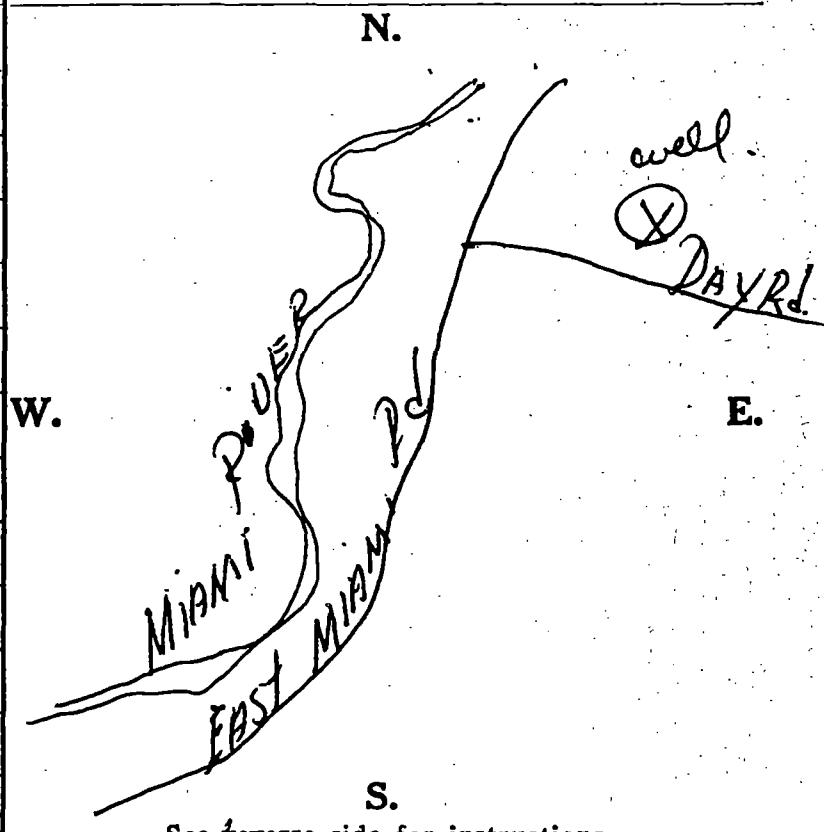
Pumping Rate _____ G.P.M. Duration of test _____ hrs.
 Drawdown _____ ft. Date _____
 Static level-depth to water _____ ft.
 Quality (clear, cloudy, taste, odor) _____
 Pump installed by Backtest 56.p.m.

WELL LOG*

Formations	From	To
Sandstone, shale, limestone, gravel and clay		
<u>Top Soil</u>	<u>0</u> Feet	<u>1</u> Ft.
<u>Clay</u>	<u>1</u>	<u>4</u>
<u>Clay + Sand.</u>	<u>4</u>	<u>15</u>
<u>SAND Gravel</u>	<u>15</u>	<u>32</u>
<u>Clay</u>	<u>32</u>	<u>68</u>
<u>Stone</u>	<u>68</u>	<u>75</u>
<u>Water at</u>	<u>68'</u>	

SKETCH SHOWING LOCATION

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.



Drilling Firm Howard Well Drilling
 Address 4253 Sykes Rd.

Date June 13 - 66
 Signed J. J. Johnson 16

*If additional space is needed to complete well log, use next consecutive numbered form.

5HR-12

Ray Wuest
6959 River Road
New Baltimore, OH 45030

Re: Drinking Water Sample Results

Dear Mr. Wuest,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Ray Muest
6959 River Road
New Baltimore, OH 45030

Re: Drinking Water Sample Results

Dear Mr. Muest,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Ray Nuest
6959 River Road
New Baltimore, OH 45030

Re: Drinking Water Sample Results

Dear Mr. Nuest,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

SUR-12

Ray West
6960 River Road
New Baltimore, OH 45036

Re: Drinking Water Sample Results

Dear Mr. West,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

DRA-12

Ray Durst
6960 River Road
New Baltimore, OH 45051

Re: Drinking Water Sample Results

Dear Mr. Durst,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) procedures. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describes the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Ray Huest
6369 River Road
New Baltimore, OH 45050

Bell: Drinking Water Sample Results

Dear Mr. Huest,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second edition of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
133 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

W8
46-144
NM 144
425/44

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Enclosures

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Hamilton County Health Department
Administration Building
130 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1040
Columbus, OH 43266-0149

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If you have any questions about your well samples, please contact me at (312) 383-1057.

Sincerely yours,

William D. Passenger, Chief
Pre-Remedial Unit

Enclosures

- cc: Plumbing Division
Hamilton County Health Department
Administration Building
133 E. Court Street
Cincinnati, OH 45202
- Ohio Environmental Protection Agency
P.O. Box 1949
Columbus, OH 43266-0149

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Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

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If you have any questions about your well samples, please contact me at (312) 353-1067.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures:

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1849
Columbus, OH 43266-0149

POSITIVE
DETERMINATION

RIN NO. Town Country Party

FREEDOM OF INFORMATION ACT RESPONSES

F O I A

EMERGENCY & REMEDIAL RESPONSE BRANCH ROUTING SLIP

TO:	INITIALS	DATE
1. SPIU Staff		
2. Chief, State Programs and Information Unit		
3. Staff, Pre-Remedial Unit	NW	8/9/88
4. Chief, Pre-Remedial Unit	legm	8-11-88
5. Jeanne Griffin, PRU (HRS Release Only)		
6. Chief, Program Support Section		

(This is an interim response only.)

NOTE: PLEASE HAND CARRY TO TOM GEISHECKER, CHIEF - PROGRAM SUPPORT SECTION
11th FLOOR - S.W. CORNER

MEMORANDUM

DATE: 2-19-88
TO: William Messenger, U.S. EPA
FROM: Cathy Schlesinger
SUBJECT: Drinking Water Sample Results

Sample RW 4
Site Name Town & Country Auto Parts
PAN # F0H0523SA
TDD # F05-8703-347
EPA ID # OHD103536876

Please find attached the data summary sheets, a copy of the original data, and laboratory blank/quality control information for the drinking water sample collected from:

Name Ray Wuest
Address 6959 River Road
City New Baltimore (Harrison)
State OHIO
Zip Code 45030
Phone Number 513/385-8580

0099:3

No Contamination X
No hits above any health-related standards.

C
6-9-88

RESIDENTIAL

WELL WATER

SAMPLE DATA

Table 1
DATA OF RESIDENTIAL WELL SAMPLE ANALYSIS
AND APPLICABLE FEDERAL DRINKING WATER STANDARDS
AND HEALTH ADVISORIES

SAMPLE: <i>RW 4</i>	CONTAMINANT	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
VOLATILE ORGANIC COMPOUNDS										
BENZENE		5	NR						1.5	
BROMODICHLOROMETHANE									1.5	
BROMOFORM									1.5	
BROMOMETHANE									10	
CARBON TETRACHLORIDE		5	NR						1.5	
CHLOROBENZENE			300						1.5	
CHLOROETHANE									1.5	
2-CHLOROETHYL VINYL ETHER									1.5	
CHLOROFORM									1.5	
CHLOROMETHANE									10	
DIBROMOCHLOROMETHANE									1.5	
1,1-DICHLOROETHANE									1.5	
1,2-DICHLOROETHANE		5	NR						1.5	
1,1-DICHLOROETHENE			7	7					1.5	
trans-1,2-DICHLOROETHENE				7.0					1.5	
1,2-DICHLOROPROPANE				NA					1.5	
cis-1,3-DICHLOROPROPENE									2	
trans-1,3-DICHLOROPROPENE									1	
ETHYL BENZENE			680						1.5	
METHYLENE CHLORIDE			NR						1	
1,1,2,2-TETRACHLOROETHANE			NR						1.5	
TETRACHLOROETHENE									1.5	
TOLUENE			2420						1.5	
1,1,1-TRICHLOROETHANE		200	200						1.5	
1,1,2-TRICHLOROETHANE									1.5	
TRICHLOROETHENE		5	NR						1.5	
VINYL CHLORIDE		2	NR						10	

Table 1 (cont.)

CONTAMINANT	VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
ACROLEIN							100			
ACETONE							75			
ACRYLONITRILE							50			
CARBON DISULFIDE							3			
2-BUTANONE			170				(50)			
VINYL ACETATE							.15			
4-METHYL-2-PENTANONE							(3)			
2-HEXANONE							(50)			
STYRENE			140				1			
XYLENE, TOTAL			440				2			
SEMI-VOLATILE ORGANIC COMPOUNDS										
ANILINE							1.5			
BIS(2-CHLOROETHYL) ETHER							1.5			
PHENOL							2			
2-CHLOROPHENOL							2			
1,3-DICHLOROBENZENE			620				2			
1,4-DICHLOROBENZENE		75	75				2			
1,2-DICHLOROBENZENE			620				2.5			
BENZYL ALCOHOL							2			
BIS(2-CHLOROISOPROPYL) ETHER							2.5			
2-METHYLPHENOL							1			
HEXACHLOROETHANE							2			
N-NITROSODI PROPYLAMINE							1.5			
NITROBENZENE							2.5			
4-METHYLPHENOL							1			

Table 1 (cont.)

Table 1 (cont.)

CONTAMINANT	SEMI-VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)							LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
		MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT				
FLUORENE								1				
4-NITROPHENOL								1.5				
4-CHLOROPHENYL PHENYL ETHER												
DIETHYL PHTHALATE								1				
4,6-DINITRO-2-METHYLPHENOL								1				
1,2-DIPHENYLHYDRAZINE								(15)				
N-NITROSODIPHENYLAMINE								1				
DIPHENYLAMINE								1.5				
4-NITROANILINE								3				
4-BROMOPHENYL PHENYL ETHER								1.5				
HEXACHLOROBENZENE			NR					1.5				
PENTACHLOROPHENOL			220					2				
PHENANTHRENE								1				
ANTHRACENE								2.5				
DI-n-BUTYL PHTHALATE								2				
FLUORANTHENE								1.5				
PYRENE								1.5				
BUTYL BENZYL PHTHALATE								3.5				
CHRYSENE												
BENZO(a)ANTHRACENE								1.5				
BIS(2-ETHYLHEXYL) PHTHALATE	BB						BB					
DI-n-OCTYL PHTHALATE								1				
BENZO(b)FLUORANTHENE								1.5				
BENZO(k)FLUORANTHENE												
BENZO(a)PYRENE								1.5				
								2				

Table 1 (cont.)

CONTAMINANT	SEMI-VOLATILE ORGANIC COMPOUNDS	LABORATORY QUALITY CONTROL DATA (ppb)						COMMENTS		
		CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
INDENO(1,2,3-cd)PYRENE								3.5		
DIBENZO(a,h)ANTHRACENE								2.5		
BENZO(g,h,i)PERYLENE								4		
2-NITROANILINE								1		
<hr/>										
PESTICIDES AND PCB'S										
ALDRIN							0.005			
alpha BHC							(0.010)			
beta BHC							(0.005)			
delta BHC							(0.005)			
gama BHC (LINDANE)		4	2	NR			0.005			
CHLORDANE							(0.020)			
4,4'-DDD							(0.020)			
4,4'-DDE							(0.005)			
4,4'-DDT							0.020			
DIELDRIN							0.010			
ENDOSULFAN I							0.010			
ENDOSULFAN II							0.010			
ENDOSULFAN SULFATE							(0.10)			
ENDRIN		0.2	0.32				0.010			
ENDRIN ALDEHYDE							(0.030)			
ENDRIN KETONE							(0.030)			
HEPTACHLOR			NR				0.030			
HEPTACHLOR EPOXIDE			NR				0.005			
4,4'-METHOXYCHLOR		5	340				0.020			
TOXAPHENE		100	NA				(0.25)			
PCB-1242			NA				(0.10)			

Table 1 (cont.)

CONTAMINANT PESTICIDES AND PCBs	CONCENTRATION OF DETECTED CONTAMINANT (ppb)						LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT			
PCB-1248			NA				(0.10)			
PCB-1254			NA				(0.10)			
PCB-1260			NA				(0.10)			
INORGANIC ANALYTES										
ALUMINUM							80			
ANTIMONY							2			
ARSENIC		50	50R				2			
BARIUM		1000	1500				6			
BERYLLIUM							1			
BORON							80			
CADMUM		0.52	10	5			10			
CADMUM			10	5			0.2			
CALCIUM							0.5			
CHROMIUM			50	120			8			
COBALT							6			
COPPER		101	1000				6			
IRON		2.42				26.7 ppm				
LEAD			50				80			
LEAD			50				2			
LITHIUM							70			
MAGNESIUM							10			
MANGANESE							0.1			
MERCURY							5			
MOLYBDENUM			2	11			0.1			
NICKEL							15			
POTASSIUM				150			15			
							2			

Table 1 (cont.)

A SURVEY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLLOWING TABLES. ONLY DETECTABLE CONCENTRATIONS ARE REPORTED. HOWEVER, IF THE COMPOUND HAS A FOOTNOTE FOLLOWING THE VALUE, CONSULT THE DEFINITION OF THE FOOTNOTE PROVIDED BELOW. ADDITIONAL QA/QC IS PROVIDED IN THE ATTACHED DATA SHEETS.

I. REPORTING UNITS

A. Organics

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - ug/kg or ppb (parts per billion)

B. Metals

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - mg/kg or ppm (parts per million)

II. DEFINITION OF FOOTNOTES TO ANALYTICAL DATA

A. Organics

FOOTNOTE	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected.
J	Indicates an estimated value.	Compound value may be semi-quantitative.
UJ	Quantitation limit is estimated due to a Quality Control (QC) protocol.	Compound was not detected.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 ng/ul in the final extract shall be confirmed by GC/MS.	Compound was confirmed by mass spectroscopy.
B	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semi-quantitative; it is <5x the blank concentration (<10x the blank concentrations for common lab artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will <u>not</u> apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semi-quantitative.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a lab artifact.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

B. Inorganics

FOOTNOTE	DEFINITION	INTERPRETATION
<u>OLD</u> <u>NEW</u>		
E E	Estimated or not reported due to interference. See laboratory narrative.	Compound or element was not detected or value may be semi-quantitative.
S s	Analysis by Method of Standard Additions.	Value may be quantitative.
R N	Spike recoveries outside QC protocols which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be semi-quantitative.
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
()	B Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ	DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J	Value is above CRDL and is an estimated value because of a QC Protocol.	Value may be semi-quantitative.
U	Compound was analyzed for but not detected.	Compound was not detected.
M	Duplicate injection precision not met.	Value may be semi-quantitative.
W	Post digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semi-quantitative.

C. Other Symbols Used

- NA Value not available due to insufficient data.
 NR Value not recommended to be calculated, since chemical has proven to be a human carcinogen.
 () Estimated value.

D. Analytical Method Qualifiers for Inorganic

"P" for ICP

"A" for Flame AA

"F" for Furnace AA

"CV" for Manual Cold Vapor AA

"AV" for Automated Cold Vapor AA

"AS" for Semi-automated Spectrophotometric

"C" for Manual Spectrophotometric

"T" for Titrimetric

"NR" if the analyte is not required to be analyzed.

POSITIVE
DETERMINATION

RIN NO. Town & Country Act

FREEDOM OF INFORMATION ACT RESPONSES

F O I A

EMERGENCY & REMEDIAL RESPONSE BRANCH ROUTING SLIP

TO:	INITIALS	DATE
1. SPIU Staff		
2. Chief, State Programs and Information Unit		
3. Staff, Pre-Remedial Unit	JW	8/9/88
4. Chief, Pre-Remedial Unit	CJW	8-11-88
5. Jeanne Griffin, PRU (HRS Release Only)		
6. Chief, Program Support Section		

(This is an interim response only.)

NOTE: PLEASE HAND CARRY TO TOM GEISHECKER, CHIEF - PROGRAM SUPPORT SECTION
11TH FLOOR - S.W. CORNER

Winton Norman
ARC Auto Parts
6950 River Road
New Baltimore, OH 45030

Re: Drinking Water Sample Results

Dear Mr. Norman,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

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ARC Auto Parts
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Winton Norman
ABC Auto Parts
6950 River Road
New Baltimore, OH 45052

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The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Several months ago, I contracted to the U.S. Environmental Protection Agency, Ecology and Energy Sector, EPA, obtained a sample of your drinking water. This sample was analyzed for over one hundred organic compounds, metals and volatile organic compounds. The summary table presents the concentration of organic compounds, metals and volatile organic compounds found in your sample. The summary table also provides information on the detection limit, a blank sample and a duplicate sample (if applicable). Additionally, driftage water standards for several substances are presented in the summary table. Should you be interested in seeing driftage water standards for any substance, the quality assurance data, which describes the second portion of the summary table, should be referred to. This table also presents the detection limit, a blank sample and a duplicate sample (if applicable). Additionally, driftage water standards for several substances are presented in the summary table. Should you be interested in seeing driftage water standards for any substance, the quality assurance data, which describes the second portion of the summary table, should be referred to. The data were referred to compare the levels found with proposed standards for protection of health and safety. The results found with proposed standards for protection of health and safety are listed below.

Best Drinking Water Sample Results

ARC Auto Parts
6550 River Road
Winnipeg, MB
H3Z 8A1
Tel: (204) 636-0038

Winton Norman
ARC Auto Parts
6950 River Road
New Baltimore, OH 45050

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Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for the synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

W8
6-11-88

WM
6-25-88

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

There are other contaminants with NCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1067.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-9149

There are other considerations which NCLS established that are not usually associated with this type of sites that we are looking at and this is no anomaly. These include attributes, relationships, relationships, and size. These are factors that we are looking at and this is no anomaly. These are factors that we are looking at and this is no anomaly.

If you have any questions about your well samples, please contact me at (312) 393-1057.

Sincerely yours,

William G. messenger, chief

Enclosures

cc: Planning Division
Health and Safety Department
138 E. Court Street
Chicago, IL 60602

P.O. Box 3049
Columbus, OH 43266-0149

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and ones we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

MEMORANDUM

DATE: 2-19-88
TO: William Messenger, U.S. EPA
FROM: Cathy Schlesinger
SUBJECT: Drinking Water Sample Results

Sample RW 1
Site Name Town & Country Auto Parts
PAN # F0H0523SA
TDD # F05-8703-347
EPA ID # OHD103536876

Please find attached the data summary sheets, a copy of the original data, and laboratory blank/quality control information for the drinking water sample collected from:

Name Winton Norman / Arc Auto Parts
Address 6950 River Rd.
City New Baltimore (Harrison)
State OHIO
Zip Code 45030
Phone Number 513/741-4611 Home: 738-2173

0099:3

No Contamination X
No hits above any health-related standards,

C.
6-9-88

RESIDENTIAL

WELL WATER

SAMPLE DATA

Table 1
DATA OF RESIDENTIAL WELL SAMPLE ANALYSIS
AND APPLICABLE FEDERAL DRINKING WATER STANDARDS
AND HEALTH ADVISORIES

SAMPLE: RW |	CONTAMINANT	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
VOLATILE ORGANIC COMPOUNDS										
BENZENE		5	NR						1.5	
BROMODICHLOROMETHANE									1.5	
BROMOFORM									1.5	
BROMOMETHANE									10	
CARBON TETRACHLORIDE		5	NR						1.5	
CHLOROBENZENE			300						1.5	
CHLOROETHANE									1.5	
2-CHLOROETHYL VINYL ETHER									1.5	
CHLOROFORM									1.5	
CHLOROMETHANE									10	
DIBROMOCHLOROMETHANE									1.5	
1,1-DICHLOROETHANE									1.5	
1,2-DICHLOROETHANE		5	NR						1.5	
1,1-DICHLOROETHENE			7	7					1.5	
trans-1,2-DICHLOROETHENE				70					1.5	
1,2-DICHLOROPROPANE					NA				1.5	
cis-1,3-DICHLOROPROPENE									2	
trans-1,3-DICHLOROPROPENE									1	
ETHYL BENZENE			680						1.5	
METHYLENE CHLORIDE				NR					1	
1,1,2,2-TETRACHLOROETHANE									1.5	
TETRACHLOROETHENE				NR					1.5	
TOLUENE				2420					1.5	
1,1,1-TRICHLOROETHANE		200	200						1.5	
1,1,2-TRICHLOROETHANE									1.5	
TRICHLOROETHENE		5	NR						1.5	
VINYL CHLORIDE		2	NR						10	

Table 1 (cont.)

CONTAMINANT	VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
ACROLEIN							100			
ACETONE							75			
ACRYLONITRILE							50			
CARBON DISULFIDE							3			
2-BUTANONE			170				(50)			
VINYL ACETATE							15			
4-METHYL-2-PENTANONE							(3)			
2-HEXANONE							(50)			
STYRENE			140				1			
XYLENE. TOTAL			440				2			
SEMI-VOLATILE ORGANIC COMPOUNDS										
ANILINE							1.5			
BIS(2-CHLOROETHYL) ETHER							1.5			
PHENOL							2			
2-CHLOROPHENOL							2			
1,3-DICHLOROBENZENE			620				2			
1,4-DICHLOROBENZENE		75	75				2			
1,2-DICHLOROBENZENE			620				2			
BENZYL ALCOHOL							2.5			
BIS(2-CHLOROISOPROPYL) ETHER							2			
2-METHYLPHENOL							2.5			
HEXAChLOROETHANE							1			
N-NITROSODI PROPYLAMINE							2			
NITROBENZENE							1.5			
4-METHYLPHENOL							2.5			
							1			

Table 1 (cont.)

Table 1 (cont.)

CONTAMINANT	SEMI-VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							BLANK	SAMPLE	DUPLICATE	
FLUORENE							1			
4-NITROPHENOL							1.5			
4-CHLOROPHENYL PHENYL ETHER							1			
DIETHYL PHTHALATE							1			
4,6-DINITRO-2-METHYLPHENOL							(15)			
1,2-DIPHENYLHYDRAZINE							1			
N-NITROSODIPHENYLAMINE										
DIPHENYLAMINE							1.5			
4-NITROANILINE							3			
4-BROMOPHENYL PHENYL ETHER							1.5			
HEXACHLOROBENZENE			NR				1.5			
PENTACHLOROPHENOL			220				2			
PHENANTHRENE							1			
ANTHRACENE							2.5			
DI-n-BUTYL PHTHALATE							2			
FLUORANTHENE							2			
PYRENE							1.5			
BUTYL BENZYL PHTHALATE							1.5			
CHRYSENE							3.5			
BENZO(a)ANTHRACENE							1.5			
BIS(2-ETHYLHEXYL) PHTHALATE	248					DB				
DI-n-OCTYL PHTHALATE							1			
BENZO(b)FLUORANTHENE							1.5			
BENZO(k)FLUORANTHENE							1.5			
BENZO(a)PYRENE							2			

Table 1 (cont.)

CONTAMINANT	SEMI-VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)						LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
		MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT			
INDENO(1,2,3-cd)PYRENE								3.5			
DIBENZO(a,h)ANTHRACENE								2.5			
BENZO(g,h,i)PERYLENE								4			
2-NITROANILINE								1			
PESTICIDES AND PCB'S											
ALDRIN								0.005			
alpha BHC								(0.010)			
beta BHC								(0.005)			
delta BHC								(0.005)			
gama BHC (LINDANE)		4	2	—				0.005			
CHLORDANE				NR				(0.020)			
4,4'-DDD								(0.020)			
4,4'-DDE								(0.005)			
4,4'-DDT								0.020			
DIELDRIN								0.010			
ENDOSULFAN I								0.010			
ENDOSULFAN II								0.010			
ENDOSULFAN SULFATE								(0.10)			
ENDRIN		0.2	0.32					0.010			
ENDRIN ALDEHYDE								(0.030)			
ENDRIN KETONE								(0.030)			
HEPTACHLOR			NR					0.030			
HEPTACHLOR EPOXIDE			NR					0.005			
4,4'-METHOXYCHLOR		5	340					0.020			
TOXAPHENE		100	NA					(0.25)			
PCB-1242			NA					(0.10)			

Table 1 (cont.)

CONTAMINANT	PESTICIDES AND PCB'S	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
PCB-1248				NA				(0.10)		
PCB-1254				NA				(0.10)		
PCB-1260				NA				(0.10)		
INORGANIC ANALYTES										
ALUMINUM								80		
ANTIMONY								2		
ARSENIC		50	50R					2		
BARIUM	1110	1000	1500					6		
BERYLLIUM								1		
BORON								80		
CADMUM	0.555	10	5					10		
CADMIUM		10	5					0.2		
CALCIUM								0.5		
CHROMIUM		50	120					8		
COBALT								6		
COPPER	121	1000				26.7PNK		6		
IRON								80		
LEAD		50						2		
LEAD		50						70		
LITHIUM								10		
MAGNESIUM								0.1		
MANGANESE								5		
MERCURY		2	11					0.1		
MOLYBDENUM								15		
NICKEL								15		
POTASSIUM			150					2		

Table 1 (cont.)

A SURVEY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLLOWING TABLES. ONLY DETECTABLE CONCENTRATIONS ARE REPORTED. HOWEVER, IF THE COMPOUND HAS A FOOTNOTE FOLLOWING THE VALUE, CONSULT THE DEFINITION OF THE FOOTNOTE PROVIDED BELOW. ADDITIONAL QA/QC IS PROVIDED IN THE ATTACHED DATA SHEETS.

I. REPORTING UNITS

A. Organics

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - ug/kg or ppb (parts per billion)

B. Metals

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - ug/kg or ppm (parts per million)

II. DEFINITION OF FOOTNOTES TO ANALYTICAL DATA

A. Organics

FOOTNOTE	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected.
J	Indicates an estimated value.	Compound value may be semi-quantitative.
UJ	Quantitation limit is estimated due to a Quality Control (QC) protocol.	Compound was not detected.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 ng/ul in the final extract shall be confirmed by GC/MS.	Compound was confirmed by mass spectrometry.
B	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semi-quantitative if it is <5x the blank concentration (<10x the blank concentrations for common lab artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone). Compound value may be semi-quantitative.
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will <u>not</u> apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semi-quantitative.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a lab artifact.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

B. Inorganics

FOOTNOTE	DEFINITION	INTERPRETATION
OLD E	Estimated or not reported due to interference. See laboratory narrative.	Compound or element was not detected or value may be semi-quantitative.
s	Analysis by Method of Standard Additions.	Value may be quantitative.
R	Spike recoveries outside QC protocols which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be semi-quantitative.
+	Correlation coefficient for standard additions in less than 0.995. See review and laboratory narrative.	Data value may be biased.
{ }	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ	DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J	Value is above CRDL and is an estimated value because of a QC Protocol.	Value may be semi-quantitative.
U	Compound was analyzed for but not detected.	Compound was not detected.
M	Duplicate injection precision not met.	Value may be semi-quantitative.
W	Post digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semi-quantitative.

C. Other Symbols Used

- NA Value not available due to insufficient data.
 NR Value not recommended to be calculated, since chemical has proven to be a human carcinogen.
 () Estimated value.

D. Analytical Method Qualifiers for Inorganic

"P" for ICP

"A" for Flame AA

"F" for Furnace AA

"CV" for Manual Cold Vapor AA

"AV" for Automated Cold Vapor AA

"AS" for Semi-automated Spectrophotometric

"C" for Manual Spectrophotometric

"T" for Titrimetric

"NR" if the analyte is not required to be analyzed.

MEMORANDUM

DATE: 2-19-88
TO: William Messenger, U.S. EPA
FROM: Cathy Schlesinger
SUBJECT: Drinking Water Sample Results

Sample RW 3
Site Name Town & Country Auto Parts
PAN # F0H0523SA
TDD # F05-8703-347
EPA ID # OH D103536876

Please find attached the data summary sheets, a copy of the original data, and laboratory blank/quality control information for the drinking water sample collected from:

Name Vicky & Ron Ritz
Address 10250 Tule Lane
City New Baltimore (Harrison)
State OHIO
Zip Code 45030
Phone Number 513 / 741-4072

0099:3

6-9-88 C

RESIDENTIAL

WELL WATER

SAMPLE DATA

Table 1
DATA OF RESIDENTIAL WELL SAMPLE ANALYSIS
AND APPLICABLE FEDERAL DRINKING WATER STANDARDS
AND HEALTH ADVISORIES

SAMPLE: <i>RW 3</i>	CONTAMINANT	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
VOLATILE ORGANIC COMPOUNDS										
BENZENE		5	NR						1.5	
BROMODICHLOROMETHANE									1.5	
BROMOFORM									1.5	
BROMOMETHANE									10	
CARBON TETRACHLORIDE		5	NR						1.5	
CHLOROBENZENE			300						1.5	
CHLOROETHANE									1.5	
2-CHLOROETHYL VINYL ETHER									1.5	
CHLOROFORM									1.5	
CHLOROMETHANE									10	
DIBROMOCHLOROMETHANE									1.5	
1,1-DICHLOROETHANE									1.5	
1,2-DICHLOROETHANE		5	NR						1.5	
1,1-DICHLOROETHENE			7	7					1.5	
trans-1,2-DICHLOROETHENE				70					1.5	
1,2-DICHLOROPROPANE				NA					1.5	
cis-1,3-DICHLOROPROPENE									2	
trans-1,3-DICHLOROPROPENE									1	
ETHYL BENZENE			680						1.5	
METHYLENE CHLORIDE			NR						1	
1,1,2,2-TETRACHLOROETHANE									1.5	
TETRACHLOROETHENE			NR						1.5	
TOLUENE			2420						1.5	
1,1,1-TRICHLOROETHANE		200	200						1.5	
1,1,2-TRICHLOROETHANE									1.5	
TRICHLOROETHENE		5	NR						1.5	
VINYL CHLORIDE			2	NR					10	

Table I (cont.)

CONTAMINANT	VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
ACROLEIN							100			
ACETONE							75			
ACRYLONITRILE							50			
CARBON DISULFIDE							3			
2-BUTANONE			170				(50)			
VINYL ACETATE							15			
4-METHYL-2-PENTANONE							(3)			
2-HEXANONE							(50)			
STYRENE			140				1			
XYLENE, TOTAL			440				2			
SEMI-VOLATILE ORGANIC COMPOUNDS										
ANILINE							1.5			
BIS(2-CHLOROETHYL) ETHER							1.5			
PHENOL							2			
2-CHLOROPHENOL							2			
1,3-DICHLOROBENZENE			620				2			
1,4-DICHLOROBENZENE		75	75				2			
1,2-DICHLOROBENZENE			820				2			
BENZYL ALCOHOL							2.5			
BIS(2-CHLOROISOPROPYL) ETHER							2			
2-METHYLPHENOL							2.5			
HEXAChLOROETHANE							1			
N-NITROSODI PROPYLAMINE							2			
NITROBENZENE							1.5			
4-METHYLPHENOL							2.5			
							1			

Table 1 (cont.)

CONTAMINANT	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
						LAB BLANK	SAMPLE	DUPLICATE	
SEMI-VOLATILE ORGANIC COMPOUNDS									
ISOPHORONE							2.5		
2-NITROPHENOL							2		
2,4-DIMETHYLPHENOL							2		
BIS (2-CHLOROETHOXY)METHANE								2.5	
2,4-DICHLOROPHENOL							2		
1,2,4-TRICHLOROBENZENE							2		
NAPHTHALENE							2		
4-CHLOROANILINE							2		
HEXACHLOROBUTADIENE							2.5		
BENZOIC ACID							(30)		
2-METHYLNAPHTHALENE							2		
4-CHLORO-3-METHYLPHENOL							1.5		
HEXACHLOROCYCLOPENTADIENE							2		
2,4,6-TRICHLOROPHENOL							1.5		
2,4,5-TRICHLOROPHENOL	10	52					1.5		
2-CHLORONAPHTHALENE							1.5		
ACENAPHTHYLENE							1.5		
DIMETHYL PHTHALATE							1.5		
2,6-DINITROTOLUENE							1		
ACENAPHTHENE							1.5		
3-NITROANILINE							2.5		
DIBENZOFURAN							1		
2,4-DINITROPHENOL							(15)		
2,4-DINITROTOLUENE							1		

Table 1 (cont.)

CONTAMINANT	CONCENTRATION OF DETECTED CONTAMINANT MAXIMUM LEVEL (ppb)	CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
						LAB BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
SEMI-VOLATILE ORGANIC COMPOUNDS									
FLUORENE						1			
4-NITROPHENOL						1.5			
4-CHLOROPHENYL PHENYL ETHER						1			
DIETHYL PHTHALATE						1			
4,6-DINITRO-2-METHYLPHENOL						(15)			
1,2-DIPHENYLHYDRAZINE						1			
N-NITROSODIPHENYLAMINE									
DIPHENYLAMINE						1.5			
4-NITROANILINE						3			
4-BROMOPHENYL PHENYL ETHER						1.5			
HEXACHLOROBENZENE		NR				1.5			
PENTACHLOROPHENOL		220				2			
PHENANTHRENE						1			
ANTHRACENE						2.5			
DI-n-BUTYL PHTHALATE						2			
FLUORANTHENE						1.5			
PYRENE						1.5			
BUTYL BENZYL PHTHALATE						3.5			
CHRYSENE									
BENZO(a)ANTHRACENE						1.5			
BIS(2-ETHYLHEXYL) PHTHALATE	68					8B			
DI-n-OCTYL PHTHALATE						1			
BENZO(b)FLUORANTHENE						1.5			
BENZO(k)FLUORANTHENE									
BENZO(a)PYRENE						1.5			
						2			

Table 1 (cont.)

CONTAMINANT	SEMI-VOLATILE ORGANIC COMPOUNDS	CONCENTRATION OF DETECTED CONTAMINANT (ppb)	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	LABORATORY QUALITY CONTROL DATA (ppb)			COMMENTS
							BLANK	SAMPLE DUPLICATE	DETECTION LIMIT	
INDENO(1,2,3-cd)PYRENE									3.5	
DIBENZO(a,h)ANTHRACENE									2.5	
BENZO(g,h,i)PERYLENE									4	
2-NITROANILINE									1	
PESTICIDES AND PCB'S										
ALDRIN								0.005		
alpha BHC								(0.010)		
beta BHC								(0.005)		
delta BHC								(0.005)		
gama BHC (LINDANE)		4	2					0.005		
CHLORDANE			NR					(0.020)		
4,4'-DDD								(0.020)		
4,4'-DDE								(0.005)		
4,4'-DDT								0.020		
DIELDRIN								0.010		
ENDOSULFAN I								0.010		
ENDOSULFAN II								0.010		
ENDOSULFAN SULFATE								(0.10)		
ENDRIN		0.2	0.32					0.010		
ENDRIN ALDEHYDE								(0.030)		
ENDRIN KETONE								(0.030)		
HEPTACHLOR			NR					0.030		
HEPTACHLOR EPOXIDE			NR					0.005		
4,4'-METHOXYCHLOR		5	340					0.020		
TOXAPHENE		100	NA					(0.25)		
PCB-1242			NA					(0.10)		

Table 1 (cont.)

CONTAMINANT PESTICIDES AND PCB'S	CONCENTRATION OF DETECTED CONTAMINANT (ppb)						LAB BLANK	LABORATORY QUALITY CONTROL DATA (ppb)		COMMENTS
	MAXIMUM CONTAMINANT LEVEL (ppb)	HEALTH ADVISORY LEVEL (ppb)	OTHER HEALTH-RELATED GUIDANCE VALUE	RANGE	SAMPLE DUPLICATE	DETECTION LIMIT				
PCB-1248			NA					(0.10)		
PCB-1254			NA					(0.10)		
PCB-1260			NA					(0.10)		
INORGANIC ANALYTES										
ALUMINUM								80		
ANTIMONY								2		
ARSENIC		50	50R					2		
BARIUM		1000	1500					6		
BERYLLIUM								1		
BORON								80		
CADMUM	0.68	10	5					10		
CADMUM		10	5					0.2		
CALCIUM								0.5		
CHROMIUM		50	120					8		
COBALT								6		
COPPER	115 2.15	1000			26.7 ppm			6		
IRON								80		
LEAD		50						2		
LEAD		50						70		
LITHIUM								10		
MAGNESIUM								0.1		
MANGANESE								5		
MERCURY		2	11					0.1		
MOLYBDENUM								15		
NICKEL								15		
POTASSIUM				150				2		

Table 1 (cont.)

A SURVEY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLLOWING TABLES. ONLY DETECTABLE CONCENTRATIONS ARE REPORTED. HOWEVER, IF THE COMPOUND HAS A FOOTNOTE FOLLOWING THE VALUE, CONSULT THE DEFINITION OF THE FOOTNOTE PROVIDED BELOW. ADDITIONAL QA/QC IS PROVIDED IN THE ATTACHED DATA SHEETS.

I. REPORTING UNITS

A. Organics

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - ug/kg or ppb (parts per billion)

B. Metals

1. Water Samples - ug/L or ppb (parts per billion)
2. Soils or Sediments - mg/kg or ppm (parts per million)

II. DEFINITION OF FOOTNOTES TO ANALYTICAL DATA

A. Organics

FOOTNOTE	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected.
J	Indicates an estimated value.	Compound value may be semi-quantitative.
UJ	Quantitation limit is estimated due to a Quality Control (QC) protocol.	Compound was not detected.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 ng/ul in the final extract shall be confirmed by GC/MS.	Compound was confirmed by mass spectroscopy.
B	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semi-quantitative if it is <5x the blank concentration (<10x the blank concentrations for common lab artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will <u>not</u> apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semi-quantitative.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a lab artifact.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

B. Inorganics

FOOTNOTE	DEFINITION	INTERPRETATION
<u>OLD</u> <u>NEW</u>		
E E	Estimated or not reported due to interference. See laboratory narrative.	Compound or element was not detected or value may be semi-quantitative.
S S	Analysis by Method of Standard Additions.	Value may be quantitative.
R N	Spike recoveries outside QC protocols which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be semi-quantitative.
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
()	B Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ	DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J	Value is above CRDL and is an estimated value because of a QC Protocol.	Value may be semi-quantitative.
U	Compound was analyzed for but not detected.	Compound was not detected.
M	Duplicate injection precision not met.	Value may be semi-quantitative.
W	Post digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semi-quantitative.

C. Other Symbols Used

- NA Value not available due to insufficient data.
 NR Value not recommended to be calculated, since chemical has proven to be a human carcinogen.
 () Estimated value.

D. Analytical Method Qualifiers for Inorganic

"P" for ICP

"A" for Flame AA

"F" for Furnace AA

"CV" for Manual Cold Vapor AA

"AV" for Automated Cold Vapor AA

"AS" for Semi-automated Spectrophotometric

"C" for Manual Spectrophotometric

"T" for Titrimetric

"NR" if the analyte is not required to be analyzed.

RIN NO. Town & County Posts

"POSITIVE"
DETERMINATION

FREEDOM OF INFORMATION ACT RESPONSES

F O I A

EMERGENCY & REMEDIAL RESPONSE BRANCH ROUTING SLIP

TO:	INITIALS	DATE
1. SPIU Staff		
2. Chief, State Programs and Information Unit		
3. Staff, Pre-Remedial Unit	AMM	8/9/88
4. Chief, Pre-Remedial Unit	LWJ	8-11-88
5. Jeanne Griffin, PRU (KRS Release Only)		
6. Chief, Program Support Section		

(This is an interim response only.)

*NOTE: PLEASE HAND CARRY TO TOM GEISHECKER, CHIEF - PROGRAM SUPPORT SECTION
11TH FLOOR - S.W. CORNER

Richard Elsen
Town & Country Auto Parts
6800 River Road
New Baltimore, OH 45030

Re: Drinking Water Sample Results

Dear Mr. Elsen,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Richard Elsen
Town & Country Auto Parts
6800 River Road
New Baltimore, OH 45030

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The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Richard Elsen
Town & Country Auto Parts
5800 River Road
New Baltimore, OH 45030

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The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

regarding those tested chemicals.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL of HAL. Your water is acceptable to drink.

The standards to compare the levels found with processed standards in the data were referred to as "Safe Drinking Water Advisory Levels" (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C.

The data were referred to compare the levels found with processed standards in the Safe Drinking Water Act with Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C.

Testing procedures can be obtained from this office at your request.

Specified portion of our results, the quality assurance data, which describe the specific operation of the laboratory, should be included in securing a copy presented on the summary table. Should you be interested in several substances added to your sample, a blank sample and a duplicate sample (if detected in your sample) are provided for standards for several substances added to your sample, a blank sample and a duplicate sample, details and quantity included for your information of organic compounds, metals and cyanide at a U.S. EPA laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

Dear Mr. Elsen,

941 Drinking Water Sample Results

Richard Elsen
Town & Country Blue Pages
6800 River Road
Rockville, MD 20850

Enclosed for your information is a summary table of results. This summary table presents the concentration of organic compounds, details and comments for your sample, a blank sample and a duplicate sample (if requested). Additions, a blank sample and a duplicate sample (if requested) are presented on the summary table. Should you be interested in securing a duplicate, contact us. Additions, a blank sample and a duplicate sample (if requested) are presented on the summary table. Should you be interested in securing a duplicate, contact us.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with health advisory levels (HAL) that are issued by EPA. EPA's Office of Drinking Water set maximum contaminant levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the standards to the safe drinking water act set maximum contaminant levels (MCL) for each of the nine synthetic organic chemicals. The MCL's are intended to protect health effects from consuming certain chemicals for the risk of illness. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a short period of time.

The results from your well show the need for the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding those tested chemicals.

Dear Mr. Eisen,

Re: Drinking water sample results

Richard C. Eisen
7000 River Road
EPA/Region 3
Philadelphia, PA 19112
Phone 215/236-4500

The results from your test show that some of the analyzed acetates that were negatively listed tested positive.

The data were reviewed to compare the levels found with grossed standards. The same date was later acq. with leaves and a duplicate sample (AII) that are grossed to the standard. The data is as follows:

Method for your information is a summary table of results. The summary table processes the decolorization of organic compounds, acids and alkalies detected in your sample, a blank sample and a duplicate sample (II). The following procedures can be followed from this office if you request.

201. Decolorizing Water Sample Results

RICHARD E. LEE
TOWN & COUNTRY WHITE PAPER
6800 FAIRFIELD ROAD
NEW BRITAIN, CT 06050

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

WJM

6-17-88

NJM
6-17-88

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

There are other contaminants with NCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

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Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

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If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Passenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
130 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

There are other contaminants with NCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihaloethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact us at (312) 353-1057.

Sincerely yours,

William D. Kessinger, Chief
Pre-Boardial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
130 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

There are other considerations with this method that are not usually
considered which the type of sites that we are looking at are and this is the
main reason why we have any questions about your well samples, please contact me at (312)

353-1307.
I hope you have a good day.

Sincerely yours,

Brian D. messenger, Cicer

Enclosures

cc: Planning division
Health and Safety Division, Department of Environment
138 E. Court Street
Georgetown, DC 20002
DHO Environmental Protection Agency
P.O. Box 1140
Columbia, MD 20460-0140

cc: Planning division
Health and Safety Division, Department of Environment
138 E. Court Street
Georgetown, DC 20002
DHO Environmental Protection Agency
P.O. Box 1140
Columbia, MD 20460-0140

FORM 1, PART 3

ORGANIC ACIDS ANALYSIS	NAME OF THE SAMPLE	RECEIVED ON	LAB NO.	DATE
ORGANIC ACIDS ANALYSIS	NAME OF THE SAMPLE	RECEIVED ON	LAB NO.	DATE
INTERFACIAL IDENTIFIED COMPOUNDS				
SOLVENT SOLUBILITY, 800 VOL. PCT. CONC.				
EFFECTION: SOLVENT SOLUBILITY, 800 VOL. PCT. CONC.				
COMPOUND NAME				
DIENE	- PROPENYLIDENE -	NEW	761	2.2 UO/L
DIENE	- PROPENYLIDENE -	NEW	697	2.0 UO/L
DIENE	- PROPENYLIDENE -	NEW	698	2.2 UO/L
MONO-2-ETHYL	I	2	3	
PROPENYLIDENE	2	3	4	
MONO-2-ETHYL	I	2	3	
COMPOUNDS				

~~New Baltimore Area / Dicks Auto Parts~~
S/21/85
Sampling is wells -
Overcasts ←
All samples iced immediately after take
Samples - 4 glass quarts each, 1/4 C
Sampling 15 wells -
Sample #1 les Ficks Homelike Inn
Well on 9:30 AM
Well off at 9:40 AM
Sampling #2 Ray West
and Sample #6 (Duplicate)
Well on at 10:01 AM
Well off at 10:12 AM
Sampling Crew
Middle River EPA
Lower Potowomoy EPA
Cloudy but clear
Mucilage Me
Left drift -
Copestal (614) 71
Dredge F.S.
Blue Point
Sampling Crew
Middle River EPA
Lower Potowomoy EPA
Cloudy but clear
Mucilage Me
Left drift -
Copestal (614) 71
Dredge F.S.
Blue Point

I

Sample #3 F. Soil Camp Ma
Summer (Lemmer) Well Ma
Grits made Mills River Road Ma
Well on 10/17, 1999
Well off Ma

Well on 11:03 AM Hydrant flushing
Summer (Lemmer) Well Sample #3
Samples taken from drinking fountain
at Girls Mass Hall Bridge
Well off 11:13 AM

Well on a + 11:03 AM Hydrant flushing
Summer (Lemmer) Well Sample #3
Samples taken from drinking fountain
at Girls Mass Hall Bridge
Well off 11:13 AM

Well on a + 11:03 AM Hydrant flushing
Summer (Lemmer) Well Sample #3
Samples taken from drinking fountain
at Girls Mass Hall Bridge
Well off 11:13 AM

Well on 11:03 AM Hydrant flushing
Summer (Lemmer) Well Sample #3
Grits made Mills River Road Ma
Well on 10/17, 1999
Well off Ma

Well on a + 11:03 AM Hydrant flushing
Summer (Lemmer) Well Sample #3
Samples taken from drinking fountain
at Girls Mass Hall Bridge
Well off 11:13 AM

Well on 11:03 AM Hydrant flushing
Summer (Lemmer) Well Sample #4
Well on 11:42
Well off 11:56
Do need for few minute flush.
Direct discharge from well discharge
Dipole EDS Summary
Sample #5 Richard Street Schuylerville
Well on at 12:10 AM
Well on at 12:10 AM

Well on 11:42
Well off 11:56
Taken prior to any tanks or treatment
Well off (Old Well) Sample #4
EDS Summary
Well on 11:42
Well off few minute flush.
Direct discharge from well discharge
Dipole EDS Summary
Sample #5 Richard Street Schuylerville
Well on at 12:10 AM

Well on 11:42
Well off 11:56
Do need for few minute flush.
Direct discharge from well discharge
Dipole EDS Summary
Sample #5 Richard Street Schuylerville
Well on at 12:10 AM

Mark Allen

Sample #7 Paul + Sally Perkins

Well on 12:38 PM

Well off 12:50 PM

Paul Perkins

SRS
notes

Sample #8 Michelle Hill

Well on 1:07 PM

Well off 1:20

Middle Still

Mark Allen

Sample #9 TRIP BLANKS

Samples transported to Columbus, Ohio
and iced up at 8:30PM (20:30)
and locked in truck inside locked
garage at 2380 Zollinger Rd, Columbus
Ohio 43221, residence of C.M. Allen
C. M. Allen May 21, 1985 - 8:32 pm.

Samples arrive at Alert section of
Wadsworth Laboratories in Canton, O.,
at 11:30 AM, 5/22/85

Conversation with Ronald Auel 10:40AM 5/23/85

Auel says Don Bloemker (Dick's brother) knows all
about the alleged dumping. Says Don told him
that Liebowitz "left town" recently when we began
to investigate the New Baltimore situation.

Auel thinks they may have also dumped in
Rubin Bros. Auto parts which Dick Bloemker
used to own. Miami Auto Parts is owned
currently by Don Bloemker and is located

Mark Allen

play to talk Earl Corson. Mr. Corson
on Killiy Rd., Whitewater Top Division
Miller Sir. and went to Watson Garage
19:30 (7:30pm) - left at 20:15 with James
Crossby Top Tuesdays Meeting 5/28/85

Boilypoy.
Parts Company. Left Kubins in 1964 after
Parts, then called Milwaukee Auto Service and
1964-1966 Dick operated at Milwaukie Auto
"Now" Blue medalia since December of
know of the incident I recalled
prior to December 1984. What I
dumping at New Ballimore Auto Parts
"I have no knowledge of any industrial
Dick's Auto Parts.

Auto Parts is what I've been calling
Blue Birds, Auto Parts, New Ballimore
Dick's Auto Parts was what is now
(2:15 pm) 14:15 Tuesday 5/28/85
Columbus Hwy with Don Bremerton
Tow of Bremerton Estill

Many Breakfast will be equalled.
Stop talking to him at 11:00 AM -
night next to the Milwaukee Auto Parts place.
Don Blocker lives in a tiny little
at the Harrison Ave exit off I-79.

4
Ward, Norman Johnson (Ward)
With Mr. Normans permission
Within Return Preperiod - 12:00 noon
5/29/85 Sample drawn exposed on
and could be dated at 21:25. Made from
above notes taken by Ward Allen

313-367-9371
Cattle. Cattle - 113 year old, thin
skinned animal - 4503 385 8522
Same animal - 6963 Xnum Pd
Shows we were the barels are
swell. Mr. Corson says he can

detect a "dry crouping fluid"
and saw several drums and
line in. Mr. Miller looked in ditch
between drums to put the water
river. Mr. Corson had to dig

bucket brought up a plastic drum
the barrel drums were found. The
town + country Auto parts) is where

behind the Metal Garage (new part of
several barrels with the backhoe
breaking them open, depth of line
was = 42 inches. 80 to 100 feet
from waterline Mr. Corson stuck

process of digging the trench for
travers on long street. In the
well (now Norman Wilsons) to serve the
bus hall a. waterline from backhoes

6/3/85 Resample Ray West Well for SP/II +
between 0.8H & 0.9H (Clews) last
and After section of roads went last
Well on at 8:25 AM Kins from 10 mi.
Two glass counts w/follow caps filled and
ced. ~~After~~ ^{After} and about
samples continue at Mike Allens house
4236 Fry Road at 6:00 PM (1700)
and will remain here locked up for the
night (6/3/85) Wetland C 3, 85, 5:00 pm

Vicky and Ron Ritz
10250 Tule Lane
New Baltimore, OH 45030

Re: Drinking Water Sample Results

Dear Mr. and Mrs. Ritz,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

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10250 Tule Lane
New Baltimore, OH 45030

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Enclosed for your information is a summary table of results. The summary table presents the concentration of organic compounds, metals and cyanide detected in your sample, a blank sample and a duplicate sample (if applicable). Additionally, drinking water standards for several substances are presented on the summary table. Should you be interested in securing a second opinion of our results, the quality assurance data, which describe the testing procedures can be obtained from this office at your request.

The data were reviewed to compare the levels found with proposed standards in the Safe Drinking Water Act with Health Advisory Levels (HAL) that are issued periodically from U.S. EPA's Office of Drinking Water in Washington, D.C. The standards in the Safe Drinking Water Act set Maximum Contaminant Levels (MCL) for nine synthetic organic chemicals. The MCL's are intended to reduce the risk of adverse health effects from consuming these chemicals over a lifetime. The HAL's on the other hand, are intended to reduce the risk of adverse health effects from consuming certain chemicals for even a short period of time.

The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Vicky and Ron Ritz
10250 Tule Lane
New Baltimore, OH 45039

Re: Drinking Water Sample Results

Dear Mr. and Mrs. Ritz,

Several months ago, a contractor to the U.S. Environmental Protection Agency, Ecology and Environment, Inc., obtained a sample of your drinking well water. This sample was analyzed for over one hundred organic compounds, metals and cyanide at a U.S. EPA contract laboratory under stringent quality assurance and quality control (QA/QC) protocol. Thank you for your cooperation in this effort.

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Vicky and Ron Ritz
10250 Tule Lane
New Baltimore, OH 45030

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Vicky and Ron Ritz
19260 Tule Lane
New Baltimore, OH 45030

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The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

Vicky and Ron Ritz
10259 Tula Lane
New Baltimore, MI 48030

Re: Drinking Water Sample Results

Dear Mr. and Mrs. Ritz,

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The results from your well show that none of the analyzed chemicals that were tested were found to exceed a MCL or HAL. Your water is acceptable to drink regarding these tested chemicals.

There are other contaminants with MCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihalomethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1057.

Sincerely yours,

William D. Messenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

W.D.
8/1/88

WA
8/1/88

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Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

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Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

There are other contaminants with NCLs established that are not usually associated with the type of sites that we are looking at and thus we did not analyze for. These include nitrates, radionuclides, coliform bacteria, total trihaloethanes, turbidity and fluoride. You may wish to contact your state agency that addresses private well water usage regarding testing for these other possible contaminants.

If you have any questions about your well samples, please contact me at (312) 353-1087.

Sincerely yours,

William R. Bessenger, Chief
Pre-Remedial Unit

Enclosures

cc: Plumbing Division
Hamilton County Health Department
Administration Building
138 E. Court Street
Cincinnati, OH 45202

Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

F.P.A. Columbus, Ohio — Transmittal Sheet

To: Mark Allen

Date: 6/24/85

Region/Co./District SWD.

Fax number: (513) 449-6357

Subj: New Baltimore

From: Chris Snider

Phone: (614) 466-8508

Date: 6/24/85

Pages to Follow: 1

If you have any questions Call (614) 466-~~7715~~
Ask for Harold Fenner [REDACTED] for verification
Our Fax Machine is a 3M 9165 - #614-466-4281

Approved By: Steve Grossman / cth
Steve Grossman

Additional Note:

Ohio EPA

NEWS RELEASE

CONTACT: Christine Snider
(614) 466-8508

For Release: * Immediately

Water sample analyses from wells in New Baltimore show no formaldehyde, however there may be contamination from area septic tanks, the Ohio Environmental Protection Agency (Ohio EPA) said today.

"A private lab in Wadsworth tested the water for 86 different chemicals commonly associated with water contaminated by hazardous or industrial waste sites, and none of them were present at detectable levels," said Ohio EPA Acting Deputy Director Paul Flanigan. "However, it appears that the presence of nitrates--most likely from septic tank contamination--interfered with the sampling in many cases. Nevertheless, it's our best judgement that the water is free of these industrial contaminants."

Flanigan explained that since individual home septic systems fall under local jurisdiction, Ohio EPA has asked the Hamilton County Health Department to look into the nitrate problem.

Of six samples analyzed last February by the Ohio Department of Health, formaldehyde was found in two samples. Results could not be determined for the remaining four due to interference in the samples. Ohio EPA then contracted with the Wadsworth lab to do the second series of tests.

Residents whose wells are affected by the nitrate problem have been notified by Ohio EPA. Those who couldn't be reached by phone will receive letters explaining the results of the tests.

Inter-Office
Communication

OhioEPA

to Jeff Hosler, Geologist, SWDO
from Russ Stein, Chief, Ground Water Section, CO
date November 12, 1974
subject:

John J. Gilligan
Governor
Dr. Ira L. Whitman
Director

Enclosed are logs of wells and test borings in the New Baltimore area. The cross-section map and boring logs are from a reconnaissance study conducted by the Ohio Division of Water in 1961.

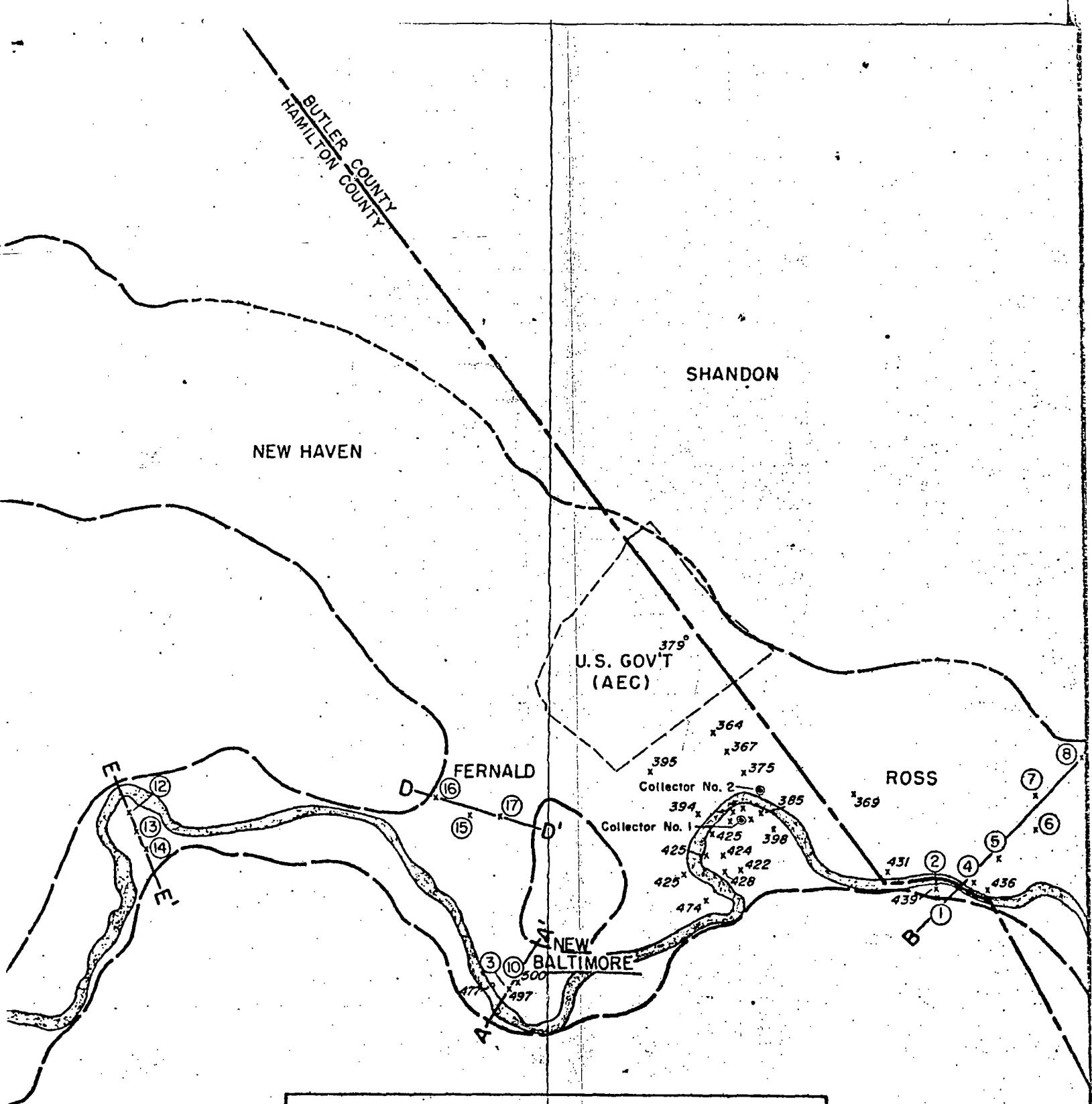
RBS/bjk

Enclosure

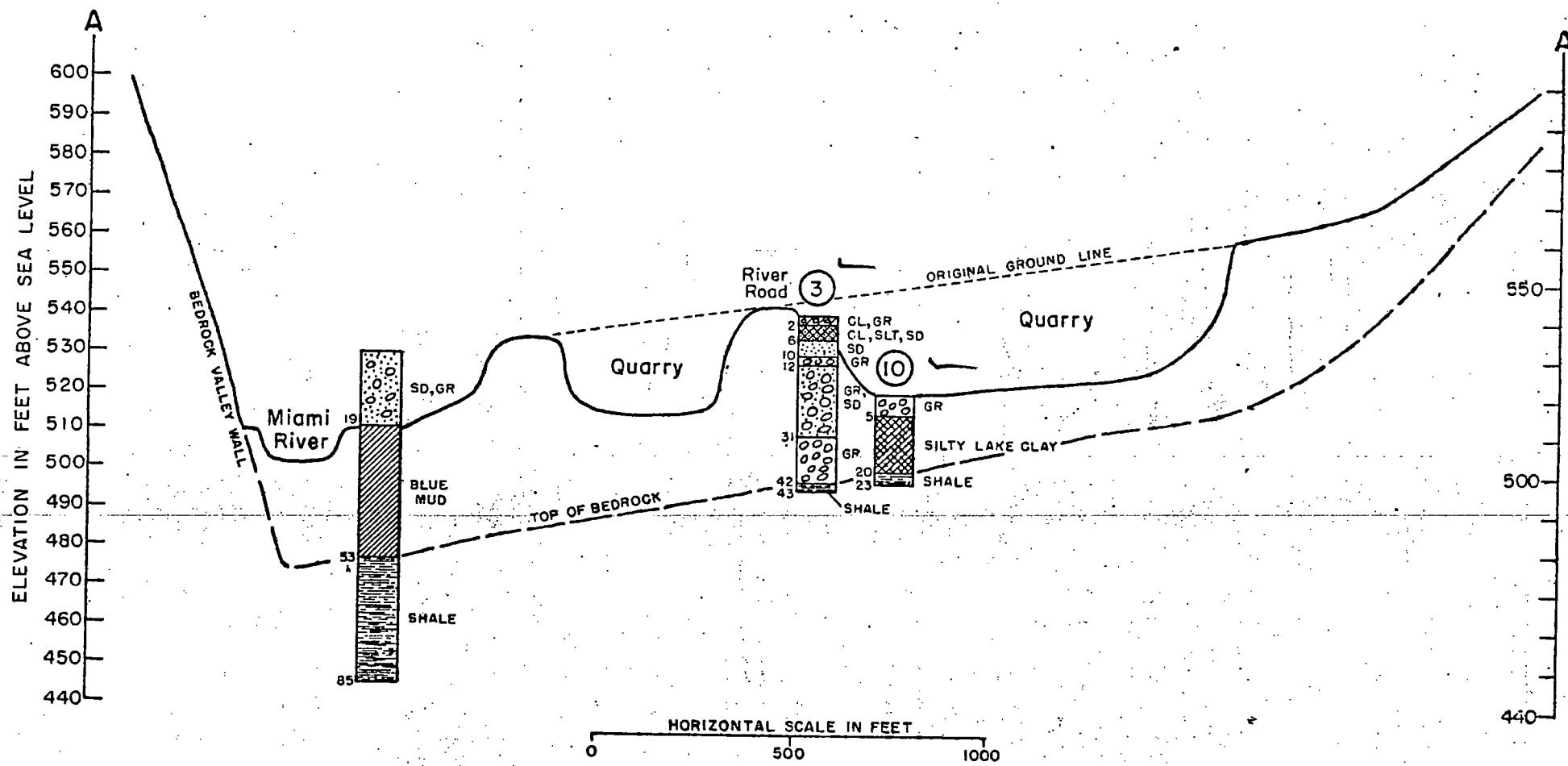
RECEIVED

NOV 14 1974

Ohio Environmental Protection Agency
SOUTHWEST DISTRICT



Reconnaissance
Study,
Ohio Div. of
Water, 1961



CROSS-SECTION A-A', NEAR NEW BALTIMORE
(See plate 2. for location)

CINCINNATI #3 ✓

New Baltimore Gravel Pit Area, North Side River Road
 Section 16, Crosby Township, Hamilton County

<u>Depth</u>		<u>Material</u>	<u>Color</u>	<u>Description</u>
0.0 - 2.0		Clay & Gravel	Red-Brown	Soft to firm; Probably road fill.
2.0 - 6.0±		Clay, Silt, Sand	Brown	Soft; Most clay; Sand-fine to coarse; Damp; Non-calcareous; Alluvium.
6.0± - 9.9		Sand	Brown	Soft; Little clay; Trace silt; Moist; Non-calcareous; Alluvium.
9.9 - 12.3		Gravel	Brown	Dense; Gravel-fine to medium, trace coarse; Sand-fine to coarse; Moist; Calcareous.
12.3 - 30.8		Gravel & Sand	Brown	Dense; Gravel-fine to medium, trace coarse; Sand-fine to coarse; Moist; Calcareous.
30.8 - 33.0		Gravel	Brown	Dense; Coarse, little fine & medium; Moist; Calcareous.
33.0 - 42.3		Gravel	Brown	Dense; Most fine to medium, some coarse; Wet; Calcareous.
42.3 - 43.0		Shale	Blue-Gray	NO SAMPLE: Lost bottom two sections of drill string. Brought up what looked like weathered blue-gray clay shale on fishing tool.

CINCINNATI #10

New Baltimore Quarry Area, 400±' NNE or #3 Test Hole & River Road
 Section 16, Crosby Township, Hamilton County

<u>Depth</u>	<u>Material</u>	<u>Color</u>	<u>Description</u>
0.0 - 5.0±	Gravel	Brown	Loose to medium-dense; Fine to coarse; Little coarse sand; Damp to 2'; then moist; Calcareous;
5.0± - 5.5±	Clay	Brown	Stiff; With pebbles in it; Some rust-stained; Damp; Non-calcareous; Varved & contorted; Composition like glacial till.
5.5±-20.0	Clay	Blue-Gray	Soft to firm; Silty; Some fine sand; Damp; Slightly calcareous; Lake Deposit.
20.0 - 23.0	Shale	Dark Green	Very stiff at 20.0' to hard at 21.0'; Dry; Non-calcareous; Bedrock.

WELL LOG AND DRILLING REPORT

ORIGINAL

**PLEASE USE PENCIL
OR TYPEWRITER
DO NOT USE INK.**

DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

Nº 279281

County Hamilton Township Crosby Section of Township

Owner Fort Scott Camps Address

Location of property. New Baltimore, Ohio

CONSTRUCTION DETAILS

Casing diameter 12" Length of casing 30'
Everdur
Type of screen Cook Length of screen
Type of pump Sumo Submersible 5E91
Capacity of pump 200 GPM
Depth of pump setting 25'
Date of completion 6-12664

BAILING OR PUMPING TEST

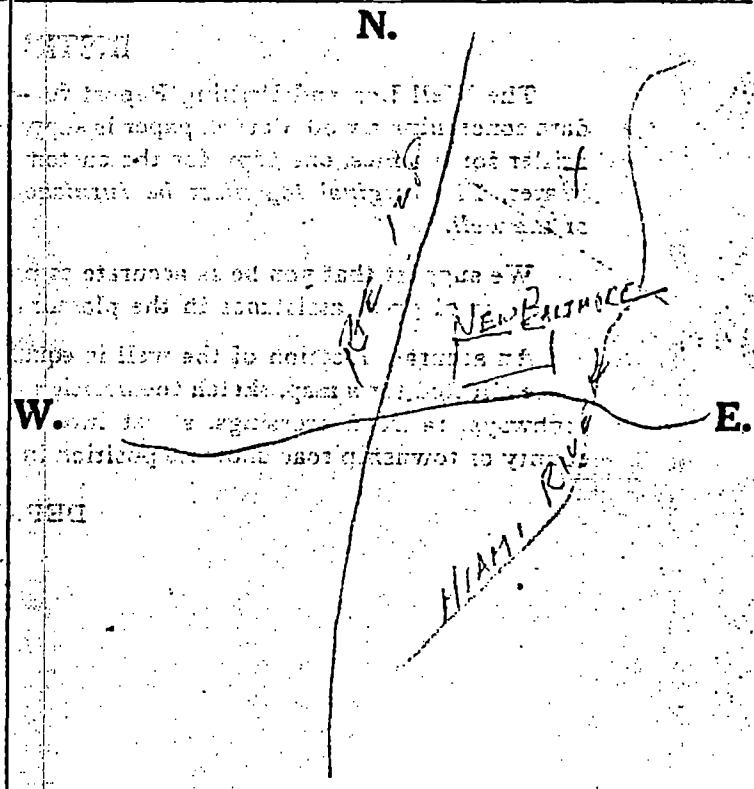
Pumping Rate 200 G.P.M. Duration of test hrs.
Drawdown 0 ft. Date
Static level-depth to water ft.
Quality (clear, cloudy, taste, odor)
Pump installed by Diehl Pump & Supply Co.

WELL LOG

Formations	From	To
Sandstone, shale, limestone, gravel and clay		

SKETCH SHOWING LOCATION

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Diehl Pump & Supply Co.
Address 3985 Race Road
Cincinnati 11, Ohio

Date November 29, 1964

Signed John Smith

WELL LOG AND DRILLING REPORT

ORIGINAL

NO CARBON PAPER
NECESSARY—
SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
65 S. Front St., Rm. 815 Phone (614) 469-2646
Columbus, Ohio 43215

435586

County Hamilton Township Crosby Section of Township 17

Owner Bradford Estates Address 698 River Rd

Location of property Sand (New Bala Moore) HARRISON OHIO 45030

CONSTRUCTION DETAILS

BAILING OR PUMPING TEST
(Specify one by circling)

Casing diameter 4 Length of casing 50

Test Rate 20 G.P.M. Duration of test _____ hrs

Type of screen _____ Length of screen _____

Drawdown ft. Date _____

Type of pump _____

Static level-depth to water ft. _____

Capacity of pump _____

Quality (clear, cloudy, taste, odor) _____

Depth of pump setting _____

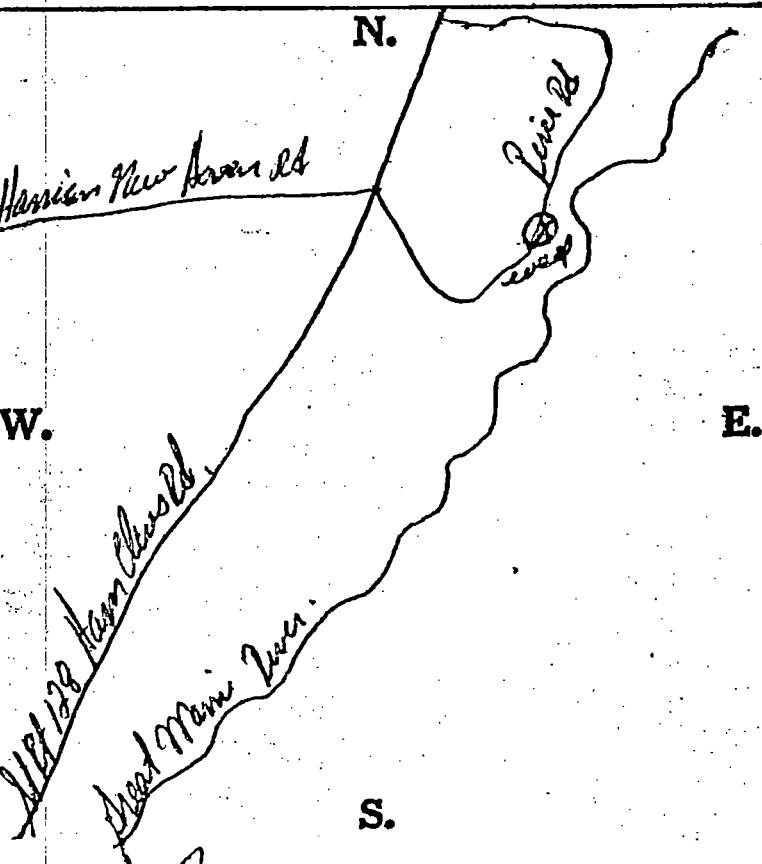
Pump installed by _____

WELL LOG*

SKETCH SHOWING LOCATION

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.

Formations	From	To
Sandstone, shale, limestone, gravel and clay		
<u>Top Soil</u>	<u>0</u> Feet	<u>1</u> Ft.
<u>Sub Soil</u>	<u>1</u>	<u>2</u>
<u>Clay Gravel</u>	<u>2</u>	<u>8</u>
<u>Gravel</u>	<u>8</u>	<u>30</u>
<u>Blue Clay</u>	<u>30</u>	<u>50</u>
<u>Water @ 30'</u>		



Drilling Firm HOOVER WELL DRILL

Date June 28-1972

Address 4253 SCIPIO RD HAM-OHIO

Signed J. M. Hooley

*If additional space is needed to complete well log, use next consecutive numbered form.

WELL LOG AND DRILLING REPORT

ORIGINAL

LEASE USE PENCIL
OR TYPEWRITER
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus 12, Ohio

Nº 291473

County Hamilton Township Crosby Section of Township 16
 Owner Matilda Kelsch Address 2122 Kemper Ln., Cincinnati, O.
 Location of property New Baltimore, O.

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 28
 Type of screen Length of screen
 Type of pump
 Capacity of pump
 Depth of pump setting
 Date of completion

BAILING OR PUMPING TEST

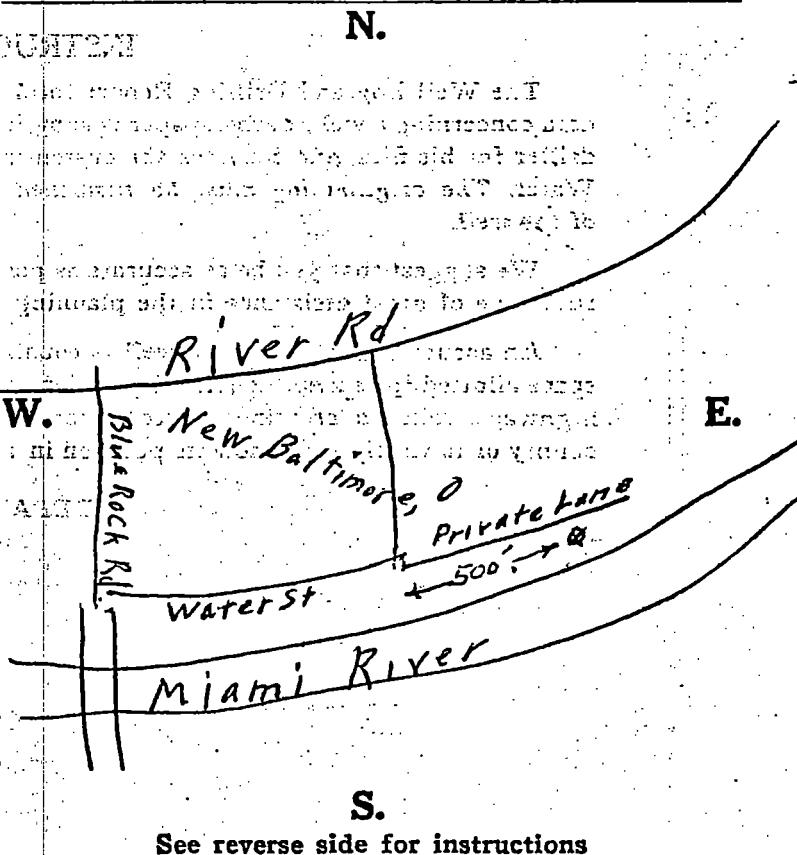
Pumping Rate G.P.M. Duration of test hrs.
 Drawdown ft. Date 10/2/63
 Static level-depth to water 24' ft.
 Quality (clear, cloudy, taste, odor) OK
3 gpm bailed test
 Pump installed by

WELL LOG

Formations	From	To	0 Feet	Ft.
Sandstone, shale, limestone, gravel and clay				
<u>Top soil</u>			<u>0</u>	<u>10</u>
<u>Coarse gravel</u>			<u>10</u>	<u>16</u>
<u>Blue clay</u>			<u>16</u>	<u>26</u>
<u>Shale</u>			<u>26</u>	<u>50</u>
<u>Water at</u>			<u>30'</u>	<u>44'</u>

SKETCH SHOWING LOCATION

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Wm CraneDate 10/2/63Address Shandon, O.Signed Wm Crane

SAMPLE PROPOSAL
FIT REGION V

✓

1. Date Form Completed 7/15/87

2. Account # F0H0523SI TDD # F05-8703-347

EPA I.D. # OHD103536876

3. Site Name, City, State Town & Country Auto Parts
New Baltimore, Ohio (Hamilton Co.)

4. Team Leader Don Clark Sampler ED Ron Short

5. Number and Type of Samples:

Soil/Sediment 4-5 Surface Water _____ Ground Water _____

Residential/Municipal Wells 4 Other _____

Number of Blanks 1 Number of Duplicates 1

6. RAS Parameters Requested:

A/B/N Pest/PCB Volatiles Metals Cyanide

SAS Parameters Requested: None

7. Expected Sampling Date(s): 18-19 Week of August 16-22

Expected Shipping Date(s): same day (s)

8. Lab Used For Analysis: Organic soil Hazlet see CAL
Inorganic soil Rm AL see Chemtech
SAS _____

9. Case Number 7914 SAS Number 3048E

10. Airbill Numbers: 8118

Organic Lab Hazlet 4228773920 # Coolers 1 # Samples 4 soils

Inorganic Lab Rm AL 4228773931 # Coolers 1 # Samples 4 soils

CRL/SAS Lab _____ # Coolers _____ # Samples _____

8119

CAL 4228773916 3 6 res

Chem 4228773942 1 1 res



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

OK

M E M O R A N D U M

DATE: September 1, 1987

TO: File

FROM: Ronald Short

SUBJECT: Corrections in Sampling Paperwork/Town and Country
Auto Parts Case #7914/3048E

On the sampling paperwork for Town and Country Auto Parts these mistakes and omissions were noted.

On organic traffic report ET121 the increased volume for the MSD was not indicated. The number of containers for extractables should have been six with a total volume of six liters. The number of containers for VOAs should have been four with a total volume of 160 mls.

On Chain-of-Custody form #09112, "metals not filtered" was omitted.

18P:2T

SAMPLE DESCRIPTION

OK

SITE NAME/TODS Town + Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 51 background

SAMPLING DATE 8/18/87 SAMPLING TIME 1730

ORGANIC TRAFFIC NUMBER ET 126

INORGANIC TRAFFIC NUMBER MEU 746

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz	Metals/Cyanide	5-152505	F7206112
8 oz	Organics	5-152506	F7206112
120 ml.	VOA	5-152507	45288032
120 ml.	VOA	5-152508	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Light brown sandy loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

N/A

SAMPLE DESCRIPTION

SITE NAME/TODS Town + Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 52

SAMPLING DATE 8/18/87 SAMPLING TIME 1135

ORGANIC TRAFFIC NUMBER ET 127

INORGANIC TRAFFIC NUMBER MEU 747

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz	Metals/Cyanide	5-152509	F7206112
8 oz	Organics	5-152510	F7206112
120 ml.	VOA	5-152511	45288032
120 ml.	VOA	5-152512	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Moist brown sand
and gravel

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TODS Town & Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 53

SAMPLING DATE 8/18/87 SAMPLING TIME 1210

ORGANIC TRAFFIC NUMBER ET 128

INORGANIC TRAFFIC NUMBER MEU 748

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Metals /cyanide	5-152513	F7206112
8oz	Organics	5-152514	F7206112
120ml.	VOA	5-152515	45288032
120ml.	VOA	5-152516	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Moist Dark Brown Sand and Gravel.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TODI Town & Country F05-8703-347
CASE NUMBER 7914

SAMPLE #/STATION LOCATION 54

SAMPLING DATE 8/18/87 SAMPLING TIME 1705

ORGANIC TRAFFIC NUMBER ET 129
INORGANIC TRAFFIC NUMBER MEU 749

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
3oz	Metals / Cyanide	5-152517	F7206112
8 oz	Organics	5-152518	F7206112
120ml.	VOA	5-152519	45288032
120 ml.	VOA	5-152520	45288032

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Dry dark brown sandy loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS

pH

CONDUCTIVITY

TEMPERATURE

0.00

SAMPLE DESCRIPTION

SITE NAME/TODI Town & Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION RW1 - MSD

SAMPLING DATE 8/19/87 SAMPLING TIME 9:15

ORGANIC TRAFFIC NUMBER ET.12.1
INORGANIC TRAFFIC NUMBER MEU 751

BOTTLE	ANALYSIS	TAG NUMBERS	MSD	LOT NUMBER	MSD
1 liter amber	organics	5-152553, 5-152558	H7134142	H7133302	
1 liter amber	organics	5-152554, 5-152559	H7134142	H7133302	
1 liter amber	organics	5-152555, 5-152560	H7134142	H7133302	
1 liter plastic	Metals	5-152551	C7173112		
1 liter plastic	Cyanide	5-152552	C7173112		
40 ml. VOA	VOA	5-152556, 5-152561	B7132131		
40 ml. VOA	VOA	5-152557, 5-152562	B7132131		

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 6.92

CONDUCTIVITY 1200 m.moles

TEMPERATURE 17°C

SAMPLE DESCRIPTION

SITE NAME/TODS Town + Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION RW2

SAMPLING DATE 8/19/87 SAMPLING TIME 1010

ORGANIC TRAFFIC NUMBER ET 122

INORGANIC TRAFFIC NUMBER MEU 752

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-152565	H7133302
1 liter amber	organics	5-152566	H7133302
1 liter amber	organics	5-152567	H7133302
1 liter plastic	Metals	5-152563	C7173112
1 liter plastic	Cyanide	5-152564	C7173112
40ml. VOA	VOA	5-152568	B7132131
40ml. VOA	VOA	5-152569	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 6.99

CONDUCTIVITY 1200 m.mf

TEMPERATURE 17°C

SAMPLE DESCRIPTION

SITE NAME/TODAY Town & Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION RW 3

SAMPLING DATE 8/19/87 SAMPLING TIME 1050

ORGANIC TRAFFIC NUMBER ET, 123

INORGANIC TRAFFIC NUMBER MEU 753

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 72	H7133302
1 liter amber	organics	5-1525 73	H7133302
1 liter amber	organics	5-1525 74	H7133302
1 liter plastic	Metals	5-1525 70	C7173122
1 liter plastic	Cyanide	5-1525 71	C7173122
40 ml. VOA	VOA	5-1525 75	B7132131
40 ml. VOA	VOA	5-1525 76	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 7.19

CONDUCTIVITY 500 m.m.

TEMPERATURE 20°C

SAMPLE DESCRIPTION

SITE NAME/TODS Town + Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION RW4

SAMPLING DATE 8/19/87 SAMPLING TIME 1130

ORGANIC TRAFFIC NUMBER ET, 124

INORGANIC TRAFFIC NUMBER MEU 754

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 79	H7133302
1 liter amber	organics	5-1525 80	H7133302
1 liter amber	organics	5-1525 81	H7133302
1 liter plastic	Metals	5-1525 77	C7173122
1 liter plastic	Cyanide	5-1525 78	C7173122
40ml. VOA	VOA	5-1525 82	B7132131
40ml. VOA	VOA	5-1525 83	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 7.22

CONDUCTIVITY 1000 m.m.

TEMPERATURE 23°C

SAMPLE DESCRIPTION

SITE NAME/TDD: Town + Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION 1 Duplicate

SAMPLING DATE 8/19/87 SAMPLING TIME 1130

ORGANIC TRAFFIC NUMBER ET 125
INORGANIC TRAFFIC NUMBER MEU 755

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 86	H7134132
1 liter amber	organics	5-1525 87	H7134132
1 liter amber	organics	5-1525 88	H7134132
1 liter plastic	Metals	5-1525 84	C7173122
1 liter plastic	Cyanide	5-1525 85	C7173122
40 ml. VOA	VOA	5-1525 89	B7132131
40 ml. VOA	VOA	5-1525 90	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS

pH 7.22

CONDUCTIVITY 1000 m.m.

TEMPERATURE 23° C.

SAMPLE DESCRIPTION

SITE NAME/TOD# Town & Country F05-8703-347
CASE NUMBER 7914 / 3048 E

SAMPLE #/STATION LOCATION Blank

SAMPLING DATE 8/19/87 SAMPLING TIME 1000

ORGANIC TRAFFIC NUMBER ET. 131
INORGANIC TRAFFIC NUMBER MEU 756

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1 liter amber	organics	5-1525 93	H7134132
1 liter amber	organics	5-1525 94	H7134132
1 liter amber	organics	5-1525 95	H7134132
1 liter plastic	Metals	5-1525 91	C7173112
1 liter plastic	Cyanide	5-1525 92	C7173112
40 ml. VOA	VOA	5-1525 96	B7132131
40 ml. VOA	VOA	5-1525 97	B7132131

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: N/A

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: NONE

INSTRUMENT READINGS	
pH	5.88
CONDUCTIVITY	0
TEMPERATURE	28°

Site Name: Town & Country
Location: New Baltimore OH
Case Number: 7914 / 3048E

SAMPLE SHIPMENT CHECKLIST:
LOW CONCENTRATION SAMPLES

Mark each item with an "X" to verify completion.

1. Is each sample bottle permanently labeled with the following information: Sample number, date, time of collection, and a brief description?
2. Are sample volumes marked on all sample bottles (except VOA's)?
3. Is each sample bottle lid secured with strapping tape or evidence tape?
4. Have all bottles been packed in plastic bags?
5. Are all samples properly preserved and iced, when appropriate, for shipment?
6. Are samples packaged in such a way as to prevent breakage?
7. Has the proper cushioning material (ie-vermiculite) been used for sample packaging?
8. Is each cooler drain taped shut?
9. Have all coolers been labeled with the proper laboratory address and has this label been covered with clear tape?
10. Has each cooler been labeled with "This Side Up" stickers on all four sides and "Fragile" stickers on at least two sides?
11. Is there at least one Chain-Of-Custody record per cooler?
12. Have the proper sections of the sampling paperwork been put in a plastic bag and taped to the inside lid of the coolers?
13. Has each cooler been secured properly with strapping tape?

14. Have numbered custody seals been affixed to the front right and back left of each cooler and covered with clear tape?
15. Has the sampler double-checked all paperwork and packaging procedures for accuracy and completeness immediately prior to strapping each cooler for shipment?
16. Have photos of each cooler, showing ice, custody seals, and proper packaging procedures, been taken?

I certify that all the above procedures have been followed and that all coolers have been properly packaged for shipment.

x Ronald W. Short Sampler
Signature

x Donald L. Clark Team Leader
Signature

NOTE: If there is any question that one of the above has been done incorrectly by any member of your team, DO NOT ship samples without checking your suspicions (even if this means re-opening coolers that have already been strapped shut!)

45T:6M

Low soils & residential

Site Name Town & Country Auto Parts TDD FS-8703-347 BHDS23 Case Number 7914/30486